CITY OF FRISCO, TEXAS ORDINANCE NO._____

AN ORDINANCE OF THE CITY OF FRISCO, TEXAS REPEALING ORDINANCE NO. 08-04-39; ADOPTING THE 2012 EDITION OF THE INTERNATIONAL FIRE CODE, SAVE AND EXCEPT THE DELETIONS AND AMENDMENTS SET FORTH HEREIN; PRESCRIBING ADDITIONAL REGULATIONS GOVERNING CONDITIONS HAZARDOUS TO LIFE AND PROPERTY FROM FIRE, HAZARDOUS MATERIALS, AND EXPLOSION; REGULATING OIL AND GAS DRILLING; PROVIDING FOR A PENALTY FOR THE VIOLATION OF THIS ORDINANCE; PROVIDING FOR REPEALING SAVINGS AND SEVERABILITY CLAUSES; PROVIDING FOR AN EFFECTIVE DATE OF THIS ORDINANCE; AND PROVIDING FOR THE PUBLICATION OF THE CAPTION HEREOF.

WHEREAS, the City Council of the City of Frisco, Texas ("City Council") has investigated and determined that it would be advantageous and beneficial to the citizens of the City of Frisco, Texas ("Frisco") to amend Ordinance No. 08-04-39; and

WHEREAS, the City Council has further investigated and determined that it would be advantageous and beneficial to the citizens of Frisco to adopt the 2012 Edition of the International Fire Code (the " 2012 International Fire Code"), save and except the deletions and amendments set forth below.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF FRISCO, TEXAS:

SECTION 1: Findings Incorporated. The findings set forth above are incorporated into the body of this Ordinance as if fully set forth herein.

SECTION 2: Repealing Ordinance No. 08-04-39. Frisco Ordinance No. 08-04-39 is repealed in its entirety and replaced by this Ordinance. The effective date of the repeal discussed in this Section shall not occur until the effective date of this Ordinance at which time Ordinance No. 08-04-39 shall be repealed. Such repeal shall not abate any pending prosecution and/or lawsuit or prevent any prosecution and/or lawsuit from being commenced for any violation of Ordinance No. 08-04-39 occurring before the effective date of this Ordinance.

SECTION 3: Adoption of the 2012 International Fire Code. The International Fire Code, 2012 Edition, copyrighted by the International Code Council, Inc., including Appendix Chapters A, B, C, D, E, F, G, H, I and J save and except the deletions and amendments set forth below, is hereby adopted as the Fire Code for Frisco, regulating and governing the safeguarding of life and property from fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials and devices, and from conditions hazardous to life or property in the occupancy of buildings and premises as herein provided. The 2012 International Fire Code is

made part of this Ordinance, as if fully set forth herein. Three (3) copies of the 2012 International Fire Code are on file in the office of the City Secretary of Frisco being marked and designated as the 2012 International Fire Code.

SECTION 4: Adopting the 2012 International Fire Code. The 2012 Edition of the *International Fire Code* as published by the International Code Council is hereby amended as follows by way of additions, deletions and amendments:

SECTION 5: Texas Accessibility Standards. At a minimum, visual signal appliances must be provided in restrooms and any other general usage areas (e.g., meeting rooms and break rooms), hallways, lobbies, and any other area for common use. If emergency warning systems are provided, then they shall include both audible alarms and visual alarms.

SECTION 6: Controlled Intersection Emergency Systems. All traffic-controlled intersections installed in Frisco shall be equipped with a device that is compatible with the GTT Opticom Priority Control System or equivalent. All Optical detectors shall be mounted at or near the intersection that permits a direct, unobstructed line-of-sight to the oncoming vehicle. Card racks and phase selectors must be mounted in traffic control cabinets.

SECTION 7: Penalty Provision. Any person, firm, corporation or business entity violating this Ordinance or any provision of Frisco Ordinance No. _____, or as amended, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined a sum not exceeding Two Thousand Dollars ($2,000.00). Each continuing day's violation under this Ordinance shall constitute a separate offense. The penal provisions imposed under this Ordinance shall not preclude Frisco from filing suit to enjoin the violation. Frisco retains all legal rights and remedies available to it pursuant to local, state and federal law.

SECTON 8: Savings/Repealing Clause. All provisions of any ordinance in conflict with this Ordinance are hereby repealed to the extent they are in conflict; but such repeal shall not abate any pending prosecution from being commenced for any violation if occurring prior to the repeal of the ordinance. Any remaining portions of said ordinances shall remain in full force and effect.

SECTION 9: Severability. Should a court of competent jurisdiction declare any section, subsection, sentence, clause or phrase of this Ordinance unconstitutional or invalid, it is expressly provided that any and all remaining portions of this Ordinance shall remain in full force and effect. Frisco hereby declares that it would have passed this Ordinance, and each section, subsection, clause or phrase thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, and phrases be declared unconstitutional or invalid.

SECTION 10: Effective Date. This Ordinance shall become effective from and after its adoption and publication as required by the City Charter and by law.

DULY PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF FRISCO, TEXAS, on this _____day of _____ 2013.

_____
Maher Maso, Mayor

ATTESTED AND CORRECTLY RECORDED:

_____
Jenny Page ,
City Secretary

APPROVED AS TO FORM:

_____
Abernathy, Roeder, Boyd & Joplin P.C.
CLAIRE E. SWANN
City Attorneys

Date(s) of Publication: _____, Frisco Enterprise

The following are amendments to the International Fire Code, 2012 Edition, as adopted by this ordinance.

Chapter 1: Scope and Administration: Scope and Administration of the 2012 International Fire Code is amended as follows:
101.1 Title. These regulations shall be known as the *Fire Code* of the City of Frisco, Texas, hereinafter referred to as "this code."

Section 102.1; change #3 to read as follows:
3. Existing structures, facilities and conditions when required in Chapter 11 or in specific sections of this code.

102.7 Referenced codes and standards. The codes and standards referenced in this code shall be those that are listed in Chapter ~~45~~ 80 and such codes, when specifically adopted, and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Section 102.7.1 and 102.7.2. Where differences occur between the provisions of this code and the referenced standards, the provisions of this code shall apply. Whenever amendments have been adopted to the referenced codes and standards, each reference to said code and standard shall be considered to reference the amendments as well. Any reference to NFPA 70 or the ICC Electrical Code shall mean the Electrical Code as adopted.

102.7.2. Provisions in reference codes and standards. Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this code and any adopted amendments, the provisions of this code and any adopted amendments, as applicable, shall take precedence over the provisions in the referenced code or standard.

Section 105.7; Add Section 105.7.17 to read as follows:
105.7.17 Smoke control or exhaust systems. Construction permits are required for smoke control or exhaust systems as specified in Section 909 and Section 910 respectively. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

Section 105.7~~.15;~~; Add Section 105.7.18 to read as follows:
105.7.18 Electronic access control systems. Construction permits are required for +the installation or modification of an electronic access control system, as specified in Section 503 and Section 1008. A separate construction permit is required for the installation or modification of a fire alarm system that may be connected to the access control system. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

Section 113.2 Schedule of Permit Fees: Add Section 113.2.1 through 113.2.3 as follows:

Section 113.2.1 Construction and Installation Permits is added as follows:

- Water-based fire suppression system: (Per Square Foot of Building)$0.03 per square foot (minimum fee $50.00)
    - Separate Standpipe fee: $150.00
- Single family residential automatic fire sprinkler system: $0.03 per square foot (minimum fee $50.00) Special fire suppression systems (Kitchen Hood/Clean Agent): $75.00Fire Alarm Systems:
    - $50.00 per building for less than ten (10) devices
    - $75.00 for eleven (11) to twenty-five (25) devices
    - $150.00 for more than twenty-five (25) devices
    - $200.00 for more than one hundred (100) devices
    - $400.00 for more than two hundred (200) devices
    - $2.00 additional for each additional device more than four hundred (400) devices
- Mechanical Trench Burn: $200.00 per day
- Underground Fire Main (Only): $50.00 per system
- Limited access security gates and perimeter fencing: $100.00 per system
- Underground or Above Ground Storage Tank: $100.00
- Storage Tanks
    - Install, repair, repair damage to, abandon, remove, place temporarily out of service, close or perform substantial modification to a storage facility when the amounts listed in 2012 IFC Table 105.6.20 are exceeded: $100.00
    - Repair of a Fuel Line (Pressure Test): $100.00
- Battery Systems
    - Installation of Battery Systems with Liquid capacity of greater than fifty (50) gallons: $100.00
- Compressed Gases Construction of compressed gas areas or facilities with greater than exempt quantities: $100.00
- Installation of an Industrial Oven: $100.00
- Drilling Fees (Oil, Natural Gas or other well facilities not to include water)
    - New Well: $5000.00
    - Operational Transfer Fee: $100.00
      Appeal Fee: $100.00

Section 113.2.2 Operational Permits is added as follows:

- Fireworks Operational Permit: $50.00 per show
- Carnivals and Fairs: $50.00 per event
- Fire Hydrants and Valves per 105.6.15: $50.00 Drilling Operational Fee (not to include water wells): $100.00 per site per year

Section 113.2.3 Plan Review and Inspection Fees is added as follows:

1. Re-inspection Fees
    - $50.00 first re-inspection

- $100.00 second re-inspection
- $150.00 third and subsequent re-inspections

2. Plan re-submittal fee: $50.00
3. Expedited Plan Review: $100.00

Chapter 2 Definitions of the 2012 International Fire Code is amended as follows:

Section 202 General Definitions of the International Fire Code shall be amended by adding the following definitions:

- **ADDRESSABLE FIRE DETECTION SYSTEM.** Any system capable of providing identification of each individual alarm-initiating device. The identification shall be in plain English and as descriptive as possible to specifically identify the location of the device in alarm. The system shall have the capability of alarm verification.

[B] AMBULATORY CARE FACILITY. Buildings or portions thereof used to provide medical, surgical, psychiatric, nursing, or similar care on a less than 24-hour basis to individuals who are rendered incapable of self-preservation. This group may include but not be limited to the following:

1. - Dialysis centers
2. Sedation dentistry
3. - Surgery centers
4. - Colonic centers
5. Psychiatric centers

- **ANALOG ADDRESSABLE FIRE DETECTION SYSTEM.** Any system capable of calculating a change in value by directly measurable quantities (voltage, resistance, etc.) at the sensing point. The physical analog may be conducted at the sensing point or at the main control panel. The system shall be capable of compensating for long-term changes in sensor response while maintaining a constant sensitivity. The compensation shall have a preset point at which a detector maintenance signal shall be transmitted to the control panel. The sensor shall remain capable of detecting and transmitting an alarm while in maintenance alert.
- **FIRE WATCH.** A temporary measure intended to ensure continuous and systematic surveillance of a building or portion thereof by one or more qualified individuals or standby personnel when required by the *fire code official*, for the purposes of identifying and controlling fire hazards, detecting early signs of unwanted fire, raising an alarm of fire and notifying the fire department
- **FIREWORKS.** Any composition or device for the purpose of producing a visible or an audible effect for entertainment purposes by combustion, *deflagration*, ~~or~~ *detonation*, and/or activated by ignition with a match or other heat producing device

that meets the definition of 1.4G fireworks or 1.3G fireworks as set forth herein.
Fireworks, 1.4G. Small fireworks devices containing restricted amounts of pyrotechnic composition designed primarily to produce visible or audible effects by combustion. Such 1.4G fireworks which comply with the construction, chemical composition and labeling regulations of the DOTn for Fireworks, UN 0336, and the U.S. Consumer Product Safety Commission as set forth in CPSC16CFR Parts 1500 and 1507, are not *explosive materials* for the purpose of this code.
Fireworks, 1.3G. Large fireworks devices, which are *explosive materials*, intended for use in fireworks displays and designed to produce audible or visible effects by combustion, *deflagration* or *detonation*. Such 1.3G fireworks include, but are not limited to, firecrackers containing more than 130 milligrams (2 grains) of explosive composition, aerial shells containing more than 40 grams of pyrotechnic composition and other display pieces which exceed the limits for classification as 1.4G fireworks. Such 1.3G fireworks are also described as Fireworks, UN 0335by the DOTn.

HIGH-PILED COMBUSTIBLE STORAGE. Storage of combustible materials in closely packed piles or combustible materials on pallets, in racks or on shelves where the top of storage is greater than 12 feet (3658 mm) in height. When required by the *fire code official*, *high-piled combustible storage* also includes certain high-hazard commodities, such as rubber tires, Group A plastics, flammable liquids, idle pallets and similar commodities, where the top of storage is greater than 6 feet (1829 mm) in height. Any building classified as a group S Occupancy or Speculative Building exceeding 6,000 sq.ft. that has a clear height in excess of 14 feet, making it possible to be used for storage in excess of 12 feet, shall be considered to be high-piled storage. When a specific product cannot be identified, a fire protection system and life safety features shall be installed as for Class IV commodities, to the maximum pile height.

- **HIGH-RISE BUILDING**. A building having any floors used for human occupancy located more than 55 feet (16 764 mm) above the lowest level of fire department vehicle access.

OCCUPANCY CLASSIFICATION. For the purposes of this code, certain occupancies are defined as follows:

[B] Business Group B. Business Group B occupancy includes, among others, the use of a building or structure, or a portion thereof, for office, professional or service-type transactions, including storage of records and accounts. Business occupancies shall include, but not be limited to, the following:

(Add to the following list of uses)
Fire Stations
Police Stations with detention facilities for 5 or less

- ~~Real property designed and used for the purpose of renting or leasing individual storage spaces to customers for the purpose of storing and removing personal property on a self-service basis.~~

- ~~**STANDBY PERSONNEL**. Qualified fire service personnel, approved by the *fire code official*. When utilized, the number required shall be as directed by the *fire code official*. Charges for utilization shall be as normally calculated by the jurisdiction.~~

Occupancy Classification of the 2012 International Fire Code shall be amended as follows:

[B] Group I-2. This occupancy shall include buildings and structures used for medical, surgical, psychiatric, nursing or custodial care for *persons* who are not capable of self-preservation. This group shall include, but not be limited to, the following:

Child Care Facilities
Detoxification facilities
Hospitals
Mental hospitals
Nursing homes

A facility such as the above with five or fewer persons shall be classified as Group R-3 or shall comply with the International Residential Code as adopted by the City of Frisco.

A child care facility that provides care on a 24-hour basis to more than five children 2 ½ years of age or less shall be classified as Group I-2.

Moderate-hazard storage, Group S-1. Buildings occupied for storage uses that are not classified as Group S-2, including, but not limited to, storage of the following:

(Add the following to the list of uses)
Self-Service Storage Facility

- ***REPAIR GARAGE***. *A building*, **structure or** portion thereof used for servicing or repairing motor vehicles. This occupancy shall also include garages involved in minor repair, modification and servicing of motor vehicles for items such as lube changes, inspections, windshield repair or replacement, shocks, minor part replacement and other such minor repairs.
- **SELF-SERVICE STORAGE FACILITY**. Real property designed and used for the purpose of renting or leasing individual storage spaces to customers for the purpose of storing and removing personal property on a self-service basis.
- **STANDBY PERSONNEL**. Qualified fire service personnel, approved by the Fire Chief. When utilized, the number required shall be as directed by the Fire Chief. Charges for utilization shall be as normally calculated by the jurisdiction.

Chapter 3 General Precautions Against Fire of the 2012 International Fire Code is amended as follows:

307 Open Burning, Recreational Fires, and Portable Outdoor Fireplaces of the 2012 International Fire Code is amended as follows:

307.1 General. A person shall not kindle or maintain or authorize to be kindled or maintained any open burning unless conducted and approved in accordance with this section. Open burning shall be conducted in trenches with (TCEQ) approved equipment. TCEQ documented approval shall be required with the permit application. Open burning shall also be conducted as required by any other governing agencies regulating emissions.

307.1.1 Prohibited open burning. Open burning ~~shall be prohibited~~ that is offensive or objectionable because of smoke emissions or when atmospheric conditions or local circumstances make such fires hazardous shall be prohibited.

Exception: Prescribed burning for the purpose of reducing the impact of wildland fire when authorized by the *fire code official*.

307.2 Permit required. A permit shall be obtained from the *fire code official* in accordance with Section 105.6 prior to kindling a fire for recognized silvicultural or range or wildlife management practices, prevention or control of disease or pests, open burning or a bonfire. Application for such approval shall only be presented by and permits issued to the owner of the land upon which the fire is to be kindled.

307.3 Extinguishment authority. ~~When open burning creates or adds to a hazardous situation, or a required permit for open burning has not been obtained, the *fire code official* is authorized to order the extinguishment of the open burning operation~~. The fire code official is authorized to order the extinguishment by the permit holder, another person responsible or the fire department of open burning that creates or adds to a hazardous or objectionable situation.

307.4 Location. The location for permitted open burning shall not be less than ~~50 feet (15 240 mm)~~ 300 feet (91.44 m) from any structure, and provisions shall be made to prevent the fire from spreading to within ~~50 feet (15 240 mm)~~ 300 feet (91.44 m) of any structure. Exceptions:

~~2. The minimum required distance from a structure shall be 25 feet (7620 mm) where the pile size is 3 feet (914 mm) or less in diameter and 2 feet (610 mm) or less in height.~~

307.4.1 Bonfires. A bonfire shall not be conducted within ~~50 feet (15 240 mm)~~ 300 feet (91.44 m) of a structure or combustible material unless the fire is contained in a barbeque pit constructed of approved non-combustible materials not exceeding 3 feet or less in diameter and 2 feet or less than height. Conditions which could cause a fire to spread within ~~50 feet (15 240 mm)~~ 300 feet (91.44 m) of a structure shall be eliminated prior to ignition.

307.4.4 Permanent outdoor firepit. Permanently installed outdoor firepits for recreational fire purposes shall not be installed within 10 feet of a structure or combustible material.

Exception: Permanently installed outdoor fireplaces constructed in accordance with the International Building Code.

307.4.5 Trench Burns. Trench burns shall be conducted in air curtain trenches and in accordance with Section 307.2

307.5 Attendance. *Open burning*, trench burning, bonfires, *recreational fires* and use of portable outdoor fireplaces shall be constantly attended until the fire is extinguished. A minimum of one portable fire extinguisher complying with Section 906 with a minimum 4-A rating or other *approved* on-site fire-extinguishing equipment, such as dirt, sand, water barrel, garden hose or water truck, shall be available for immediate utilization.

Section 308.1.1; add sentence to read as follows:
Unmanned free-floating devices containing an open flame or other heat source, such as but not limited to sky lanterns shall be prohibited.

Section 308.1.4 Open flame cooking devices. Charcoal burners and other open-flame cooking devices shall not be operated on combustible balconies or within 10 feet (3048 mm) of combustible construction**.**

Exceptions:

1. One- and two-family *dwellings*.
~~2. Where buildings, balconies and decks are protected by an *automatic sprinkler system*.~~
3. LP-gas cooking devices having LP-gas container with a water capacity not greater than 2 1/2 pounds [nominal 1 pound (0.454 kg) LP-gas capacity].

308.1.4.1 Residential Portable Gas Grills. LP-Gas containers are allowed to be used to supply portable gas grills at residential occupancies. Such containers shall not exceed twenty (20)-pound (9.0kg) water capacity.

Exception: Except as permitted in 308.1.4.1, LP-Gas containers are not allowed in residential areas that offer natural gas.

~~**308.1.4.2 Maximum Capacity within Established Limits.** Within the limits established by law restricting the storage of LP-gas for the protection of heavily populated or congested commercial areas, the aggregate capacity of any one (1) installation shall not exceed a two-thousand (2,000)-gallon water capacity.~~

Section 308.1.6.2 Portable fueled open-flame devices
Exceptions:
1 1. LP gas fueled used for sweating pipe joints or removing paint in accordance with Chapter 38
2. Cutting and Welding Operations in accordance with Chapter 26.
3. Torches or flame-producing devices in accordance with Section ~~308.4~~ 308.1.3.
4. Candles and open-flame decorative devices in accordance with Section 308.3.1 Open-flame decorative devices.

311.5 Placards. ~~Any~~ The *fire code official* is authorized to require marking of any vacant or abandoned buildings or structures determined to be unsafe pursuant to Section 110 of this code relating to structural or interior hazards, ~~shall be marked~~ as required by Section 311.5.1 through 311.5.5.

Chapter 4 Emergency Planning and Preparedness of the 2012 International Fire Code is amended as follows:

Section 403 is amended to read as follows:

403.3 Crowd managers. Trained crowd managers shall be provided for facilities or events where more than 1,000 persons congregate. The minimum number of crowd managers shall be established at a ratio of one crowd manager to every 250 persons. ~~Where *approved* by the *fire code official*, the ratio of crowd managers shall be permitted to be reduced where the facility is equipped throughout with an *approved automatic sprinkler system* or based upon the nature of the event.~~

Exceptions:

1. The number of crowd managers may be reduced by up to fifty percent when, in the opinion of the code official, the fire protection provided by the facility and the nature of the event warrant a reduction
2. Assembly occupancies used exclusively for religious worship with an occupant load not exceeding 1,000.

403.3.1 Training. Training for crowd managers shall be approved and shall be based upon a valid job task analysis.

403.3.2 Duties. The duties of crowd managers shall include:

a. An inspection of the area of responsibility to identify and address any egress barriers
b. An inspection of the area of responsibility to identify and mitigate any fire hazards
c. Ensure compliance with all permit conditions, including those governing pyrotechnics and other special effects
d. To direct and assist the event attendees in evacuation during an emergency
e. Assist emergency response personnel if requested.
f. Other duties outlined by the Fire Code Official
g. Other duties outlined in the Emergency Plan

401.3.4 False Alarms and Nuisance Alarms. False alarms and nuisance alarms shall not be given, signaled or transmitted or caused or permitted to be given, signaled or transmitted in any manner.

404.2 Where Required shall be amended to add the following:

404.2 Where Required. An *approved* fire safety and evacuation plan shall be prepared and maintained for the following occupancies and buildings. Copies of the required, *approved* plans shall be provided to the Fire Department in an *approved* electronic format.

Items 1- 15 remain unchanged.

Chapter 5 Fire Service Features of the 2012 International Fire Code is amended as follows:

Section 503 Fire Apparatus Access Roads of the 2012 International Fire Code is amended as follows:

503.1.1 Buildings and facilities. Approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirement of this section and shall extend to within 150 feet (45 720mm) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility. The one-hundred fifty (150) feet shall be measured along a ten (10) foot wide unobstructed level pathway not exceeding a slope of 5:1, around the external walls of the structure. Retaining walls with a drop of four (4) feet or greater shall be provided with a fence or barrier to prevent accidental falls. The provision of this section notwithstanding, fire lanes may be required to be located within thirty (30) feet of a building if required by the *fire code official* to enable proper protection of the building. An unobstructed five- (5) foot wide level pathway shall be provided through all barriers. A continuous row of parking between the fire lane and the structure shall be considered a barrier. Fire lane easements shall be provided to serve all buildings through parking areas, to service entrances of buildings, loading areas and trash collection areas and other areas deemed necessary to be available to fire and emergency vehicles. All commercial buildings and residential sub-divisions shall be provided with a minimum of two (2) points of access. (A dead-end street with two (2) points is not considered two (2) points of access.) Residential sub-divisions shall not provide a second point of access through commercial developments. The ~~Chief~~ *fire code official* is authorized to designate additional requirements for fire lanes where reasonably necessary to provide access for fire and rescue personnel. Dead end fire lanes are not allowed unless approved by the *fire code official.*

Exception: The *fire code official* is authorized to increase the dimension of 150 feet (45 720 mm) where reasonable conditions exist to allow for a greater distance.
~~1. The building is equipped throughout with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3.~~
~~2. Fire apparatus access roads cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions, and an *approved* alternative means of fire protection is provided.~~
~~3. There are not more than two Group R-3 or Group U occupancies.~~

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than ~~20 feet (6096 mm)~~ (24) twenty-four feet (7315 2 mm), exclusive of shoulders, in accordance with Section 503.6, and an unobstructed vertical clearance of not less than ~~13 feet 6 inches (4115m)~~ (14) fourteen feet (4267.2 mm). Security gates shall be installed in accordance with Section 503.6.

503.2.2 Authority. The *fire code official* shall have the authority to require an increase in the minimum access widths and vertical clearances where they are inadequate for fire or rescue operations.

503.2.4 Turning radius. The required turning radius of a fire apparatus access road shall be determined by the fire code official and shall be no less than the following:

1. For ninety (90) or less degree turns:
    a. Twenty-four (24) feet fire lane- minimum radius twenty (20) feet
    b. Thirty (30) feet fire lane- minimum radius twenty (20) feet
2. Dimensions for Fire Department Apparatus Access Road Cul-de-sac shall be as follows:
    a. Fifty (50) feet radius inside of curb to inside of curb.
3. Center island: No center island is permitted on Fire Apparatus Access Roads. Special consideration will be given to increased radius cul-de-sacs and roundabouts; however, trees, obstructions, and/or barriers are specifically prohibited in these islands unless otherwise approved by the Fire Chief.

503.2.5 Dead ends. Dead-end fire apparatus access roads ~~in excess of 150 feet (45 720 mm) in length~~ shall be provided with an *approved* area for turning around fire apparatus.

503.3 Marking. Where required by the fire code official, approved signs, curb paint (stripping) or other approved notices or markings that include the words NO PARKING---FIRE LANE shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. The use of multiple means of marking will be approved and/or required by the *Fire Code Official*. The means by which fire lanes are designated shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility. Curb paint (stripping) and signs shall comply with the following:

(1) Stripping- Fire apparatus access roads shall be marked by painted lines of red traffic paint six (6) inches in width to show the boundaries of the fire lane. The words "NO PARKING FIRE LANE" shall appear in four (4) inch white letters at twenty-five (25) feet intervals on the red border markings along both sides of the fire lanes.
(2) Signs- shall read "NO PARKING FIRE LANE" and shall be twelve (12) inches wide and eighteen (18) inches high. Signs shall be painted on a white background with letters and borders in red, using no less than two (2) inch lettering. Signs shall be permanently affixed to a stationary post and the bottom of the sign shall be six (6) feet, six (6) inches above finished grade. Signs shall be spaced no more than fifty (50) feet apart. Signs may be installed on permanent buildings or walls or as approved by the ~~Frisco Fire Chief~~. *fire code official*.

503.4 Obstruction of fire apparatus access roads. Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Section 503.2.1 and any area marked as a fire lane as described in Section 503.3 shall be maintained at all times.

503.6 Security gates and barricades. The installation of security gates across a fire apparatus access road ~~shall be approved by the Fire Chief~~ is prohibited unless approved the Frisco Fire Chief~~.~~ *fire code official*.
~~Where security gates are installed they shall have an approved means of emergency operation. The security gates and emergency operation shall be maintained operational at all times~~. Electric gate operators, where provided, shall be *listed* in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F 2200. Where permitted by the *fire code official*, to allow the incorporation of limited access control gates across dedicated or designated fire lane easements, to ensure that emergency

access routes are maintained unobstructed and that emergency vehicles are not delayed entering these properties, a separate permit must be applied for the security gate and/or barricade must comply with the following:

503.6.1 Permit Required. Prior to the installation of a gate system that extends across a fire lane, the owner or person in charge of the property must obtain a permit from the City of Frisco. *fire code official.* Plans for gate systems shall be submitted to the Fire Marshal's Office for review and approval before a permit is issued. Such plans shall be of standard blueprint quality, drawn to a standard scale, listing all details, specifications or diagrams necessary to provide a description of the work to be done and the gates mechanical operation. The permit may be revoked if the permit holder fails to maintain the gate system(s) in good working order, which may cause the delay or obstruction of emergency services gaining immediate access to the property.

503.6.2 Definitions.

- **Security Gate / Privacy Gate / Limited Access Gates —** Shall mean any vehicle access way from a public street to private property which has an access gate that limits or controls vehicle access onto the property.
- **Gate System —** A gate system includes each drive gate, pedestrian gate, operating mechanism, receiver, electrical system, chain, belt, pulley, all hardware appliances and all other type equipment or items necessary for each gate to function as intended and herein described.
- **Primary Drive Gate Type -** The primary drive gate type that may be installed across fire lanes shall be the sliding type. If the installation of sliding gates is not possible due to the layout of the property or buildings thereon, alternate types of gate installations may be considered.
- **Main Gate —** Shall mean the gate and entryway designed as the primary entrance for guests, residents, deliveries, employees, patrons, etc.
- **Owner** — Shall mean a person, corporation partnership, association or any other similar entity.
- **Primary Emergency Access —** Shall mean the drive or access point designed as the primary point or one of several primary points of ingress/egress for emergency vehicles.
- **Secondary Emergency Access —** Shall mean the drive or access point designed as a secondary or back-up means of ingress/egress for emergency vehicles.

503.6.3 General Requirements. All limited access drives from public streets shall be designed to accommodate emergency service vehicles (fire-police-medical). All limited access drives will be designated as either a primary or secondary emergency access way, as determined by the *fire code official*. The primary means of gate operation shall be by "Opticom." The emitter shall be located on top of the gate or in a location not less than nine (9) feet tall as to prevent tampering with the equipment. An exit loop shall be provided a minimum of 14 feet from the gate if an exit loop is installed. Mini-warehouses and nonresidential buildings shall adhere to these requirements also. If the gate is not constructed as to allow for the free passage of exiting vehicles then the gate shall be fitted with an "Opticom" emitter on each side of the gate. In the event of an operation failure, the gate shall open by means of the Key switch that is mounted on the keypad or other approved location. Upon activation of the Key switch, the affected gate shall

automatically open to a lock-open and disabled condition. The system will require manual reset to close the gates after emergency activation.

503.6.3.1 Final System Access (Back-Up) — Electrical Disconnect/Chain Access. In the event of an Opticom or Key Switch failure, the gate shall open by means of an electrical power disconnect switch in a weatherproof box. The gate shall be capable of being physically disconnected from the operator mechanism from either side of the gate. Slider gate chains shall be accessible to be cut and release the gate from the opener mechanism from either side. Swing gates shall have a pin in the swing arm mechanism secured by a Knox Padlock. The padlock shall be accessible from either side of the gate.

503.6.3.2 Electrical Equipment Protection. All electrical and electronic equipment shall be protected from physical damage and weather by approved watertight boxes or housings.

503.6.3.3 Performance Tests. Gates and gate systems shall be tested upon completion of the installation of a gate or gate system or when required by the Fire Department. Failure of a gate or gate system test will require that all affected gates shall be chained and locked in the open position until repaired and retested.

503.6.3.3.1 Performance Test Observation. The Fire Department shall observe all required tests.

503.6.3.3.2 Application for Knox Company Equipment (Key **Box, Key Switch, Padlock)** Key Boxes, Key Switches and Padlocks must be obtained from the Knox Company. The City receives no payment or gratuity from the Knox Company for this franchise..

503.6.3.3.3 Opticom Gate Openings System. All primary emergency access gates shall be equipped to operate with the "Opticom" gate opening system, "Knox" Key switch and fail safe manual back-up or automatic release in the event of a failure of the electrical or mechanical system. The Key switch shall be located on a keypad pedestal or call box as approved by the Fire Marshal. All automated gates must also be equipped with one flasher unit and one external lamp assembly with a red globe and guard to be mounted separate from the enclosure. The light shall be visible from both sides of the gate, be mounted at the top of the fence within two (2) feet of the gate opening and flash upon the gate being activated by the Opticom System or switch and continue to flash as long as the gate is being held by the emergency access system.

503.6.3.3.4. Automated Secondary Emergency Access Gates. All automated secondary emergency access gates shall be equipped to operate with the Knox key switch mounted on a key pad pedestal and have an electrical disconnect contained within an approved box secured by a Knox padlock to allow manual opening of the gate by emergency personnel. All manual secondary emergency access gates shall open by means of a Knox padlock.

503.6.3.3.4 Accommodation of other services. Provisions shall be made to accommodate other services including, but not limited to Police, Public Works, Sanitation Services, Utility Services, and Postal Service.

503.6.3.3.5 Specific Requirements. The minimum clear opening width shall be not less than twenty-four (24) feet and a minimum unobstructed height of fourteen (14) feet shall be maintained.

503.6.3.3.5.1 Limited access gates. Limited access gates shall be designed and constructed in a workman-like manner. Gate materials shall be approved by the *fire code official*. Pedestrian gates shall open fully with a minimum clear span of forty-eight (48) inches and be provided with a latch or other means of securing them in the open position. Automated pedestrian gates shall open freely upon loss of power. When required by the *fire code official* one or multiple pedestrian gates shall be released by a Knox Lock or by a KEY switch mounted in an approved box.

503.6.3.3.6 Primary System Access (Emergency) — Opticom System Emitter receivers shall be located at each primary access gate or point as deemed necessary by the *fire code official*. Upon receiving the transmission of the emitter signal at any drive gate the affected gate shall automatically open.

503.6.3.3.7 Secondary System Access (Back-Up) KEY Switch In the event of power failure the gate shall open by means of a battery back-up system. The gate may either open automatically or be designed to provide multiple openings through a battery powered system.

Section 505 Premises Identification of the 2012 International Fire Code is amended as follows:

505.1 Address identification. ~~New and existing buildings shall have approved address numbers and or letters, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property and from all alleyways, fire lanes or other vehicle access to the rear of buildings. These numbers shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall be a minimum of 4 inches (101.6 mm) 6 inches (152.4 mm) high with a minimum stroke width of 0.5 inch (12.7 mm) 1 inch (25.4 mm). Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure.~~ Approved numerals of a minimum 6" height and of a color contrasting with the background designating the address shall be placed on all new and existing buildings or structures in a position as to be plainly visible and legible from the street or road fronting the property and from all rear alleyways / access.

Where buildings do not immediately front a street, approved 6 inch height building numerals or addresses and 3-inch height suite / apartment numerals of a color contrasting with the background of the building shall be placed on all new and existing buildings or structures. Numerals or addresses shall be posted on a minimum 20 inch by 30 inch background on border.

Address numbers shall be Arabic numerals or alphabet letters. The minimum stroke width for 6 inch high letters shall be 1.0 inch and 3 inch high letter shall be 0.5 inches.

Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure.

Section 506 Key Boxes of the 2012 International Fire Code is amended as follows:

506.1 Where required. Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or fire-fighting purposes, the *fire code official* is authorized to require a key box to be installed in an *approved* location. The key box shall be of an *approved* type listed in accordance with UL 1037 and shall contain keys to gain necessary access as required by the *fire code official*. Key Boxes, Key Switches and Padlocks must be obtained from the Knox Company. The City of Frisco receives no payment or gratuity from the Knox Company for this franchise.

Section 507 Fire Protection Water Supplies of the 2012 International Fire Code is amended as follows:

Section 507.4; change to read as follows:

507.4 Water supply test date and information. The water supply test used for hydraulic calculation of fire protection systems shall be conducted in accordance with NFPA 291 "Recommended Practice for Fire Flow Testing and Marking of Hydrants" and within one year of sprinkler plan submittal. The *fire code official* shall be notified prior to the water supply test. Water supply tests shall be witnessed by the *fire code official*, as required ~~or approved documentation of the test shall be provided to the *fire code official* prior to final approval of the water supply system~~. The exact location of the static/residual hydrant and the flow hydrant shall be indicated on the design drawings. All fire protection plan submittals shall be accompanied by a hard copy of the waterflow test report, or as approved by the *fire code official*. The report must indicate the dominant water tank level at the time of the test and the maximum and minimum operating levels of the tank, as well, or identify applicable water supply fluctuation. The licensed contractor must then design the fire protection system based on this fluctuation information, as per the applicable referenced NFPA standard. Reference 903.3.5 for additional design requirements.

507.5 Fire hydrant systems. Fire hydrant systems shall comply with Sections 507.5.1 through 507.5.6.

507.5.1 Where required. ~~Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 400 feet (122 m) from a hydrant on a fire apparatus access road, as measured by an *approved* route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the *fire code official*.~~

~~**Exceptions:**~~

~~1. For Group R-3 and Group U occupancies, the distance requirement shall be 600 feet (183 m).~~
~~2. For buildings equipped throughout with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2, the distance requirement shall be 600 feet (183 m).~~

The location, number and type of fire hydrants connected to a water supply capable of delivering

the required fire flow shall be provided on the public street or on the site of the premises or both to be protected as required and approved. A fire hydrant shall be located within (100) one hundred feet of a fire department connection. Fire hydrants shall be spaced in accordance with the following;

Occupancy	
One and Two Family Dwellings and Group U Occupancies	five hundred (500) feet
All others structure	three hundred (300) feet

Hydrants shall be provided at all intersecting streets and at intermediate locations between intersections as prescribed above, measured, as the hose would be laid. Hydrants will be installed at all intersecting fire- apparatus access roads.

Fire hydrants shall be accessible to the fire department apparatus by roads meeting the requirements of Section 503

Dead end water lines shall serve no more than the following number of hydrants and fire appliances.

Six (6) inch lines	one (1) hydrant or fire appliance
Eight (8) inch lines	two (2) hydrants or fire appliance

Appendix C, Table C105.1 of the International Fire Code shall serve as a minimum standard for fire flow in cases where number and size are negotiable.

507.5.4 Obstruction. Unobstructed access to fire hydrants shall be maintained at all times. Posts, fences, vehicles, growth, trash, storage and other materials or objects shall not be placed or kept near fire hydrants, fire department inlet connections or fire protection system control valves in a manner that would prevent such equipment or fire hydrants from being immediately discernible. The fire department shall not be deterred or hindered from gaining immediate access to fire protection equipment or fire hydrants.

509.1.1 Sign Requirements. Unless more stringent requirements apply, lettering for signs required by this section shall have a minimum height of two (2) inches when located inside a building and four (4) inches when located outside, or as approved by the *fire code official*. The letters shall be of a color that contrasts with the background.

Section 511 Radio Signal Booster System Specification is added as follows:

511.1 Purpose

The City of Frisco, Texas operates a digital P25 public safety radio system. The system was designed to provide clear, intelligible, in-building communication for portable radios worn at the hip with an area coverage reliability of 95% or greater. This specification describes the requirements of a Radio Signal Booster System which will correct for a reduction in the radio signal to a level below that required to assure the 95% area coverage reliability needed for public safety communications caused by a new building (structure) development. Radio Signal Booster

Systems will be required in any new construction of buildings that are within the city limits but do not benefit from the radio coverage delivered by the City's 700/800 MHz (megahertz) trunked radio system.

Erection of new buildings affects the radio system coverage. The effect on radio coverage is dependent on location (distance from the radio transmitter and receiver and other buildings in the vicinity), height projected frontal area and construction materials. If the City's analysis indicates that there may be a reduction in radio system coverage to a level below that considered acceptable for reliable public safety communications, corrective action will be required to assure radio system coverage reliability is retained within identified buildings. At the minimum, a Radio Signal Booster System will be required. In extreme situations, it may be necessary to install a satellite receiver system or a full transmit and receive site.

511.2 System Design Criteria for Buildings and Structures

The Signal Booster System shall amplify all signals within the required frequency band and provide the necessary radio system coverage into interior portions of the building including all basement levels as well as any partially underground areas of the building.

The Radio Signal Booster System shall consist of an exterior antenna, a bi-directional amplifier system with a backup power supply mounted in a suitable location in the building and an in-building antenna and/or radiating cable system as necessary to provide the stated signal level. The bi-directional amplifier must have capabilities of channelization to prevent amplification of unwanted signals. Broadband amplifiers will not be approved. The Signal Booster System shall be designed to operate in the *769-765 and 799-806 MHz band as well as the 806-861 MHz* band. The Signal Booster System shall be designed to provide a minimum -109 dBm RF signal level or a transmitted signal BER (bit error rate) not to exceed 5%, and a minimum of 10 dB above the RF noise floor, at any point within the building.

The Signal Booster System shall employ technology that maintains maximum required output power while preventing excessive emissions per FCC requirements. All equipment must be FCC type accepted and approved for digital signal amplification. RF filtering shall be employed as necessary to reduce the emission of non-desired signals. Signal levels can not extend beyond the building area where coverage is poor to prevent interference.

All system designs shall be presented to the City of Frisco for review and approval. Once the Signal Booster System is implemented, the City of Frisco will test the installed system to verify if it meets the requirements as stated in this document. In the event the system does not meet the requirements of the City, the system shall be modified and upgraded so that it meets the stated performance specifications.

Section 512 Automatic Electronic Defibrillators is added as follows:

512Automatic External Defibrillator (AED) Requirements.
512.1 Definitions And Purpose
512.1.1 Definition of "Automated External Defibrillator (AED)" means a heart monitor and defibrillator that meet the requirements of the Texas Health and Safety Code and applicable

federal law, as amended.

512.1.2 Definition of "AED Owner" means a person or entity that owns or possesses an Automatic External Defibrillator. Vendors or dealers that own or possess AEDs solely for resale are not included as owners for the purposes of this ordinance.

512.1.3 Purpose. The purpose of Section 511 is to promote public health, safety, and welfare by improving emergency care response times to those suffering from sudden cardiac arrest, thereby improving chances of survival. The requirements of this section are intended to provide for faster emergency response in large buildings, multi-story buildings, and/or buildings with large numbers of occupants where first responder access may be impeded due to building use, occupancy, location, layout, construction, or other reasons. This section is not intended to create a new standard of care.

512.2 Duties of AED Owner. Any person who presently owns or acquires an AED on or after the effective date of this ordinance, other than vendors or dealers of AEDs owning or possessing AEDs solely for resale purposes, shall:

512.2.1 Registration. Register the AED with the Fire Department Emergency Medical System Coordinator or the Fire Chief. The registration shall include information about AED location, and the names of all persons expected to operate the AED, and the dates of training. A form will be provided by the Fire Department;

512.2.2 Inspection and Maintenance. Inspect, test, store, maintain and service the AED in accordance with all federal and state laws and regulations, and in accordance with any standards established by the AED manufacturer. Documentation shall be maintained by the owner for the past three (3) years of the unit being in service.

512.2.3 Notification of Use. Notify the Fire Department as soon as possible, but in no event any later than 24 hours following any use of the AED (excluding hospitals or other end-care facilities), and provide the Fire Department with information relevant to the incident, including but not limited to the date, time and location of use, name of person the AED was used upon, the printout from the AED, and the nature of other emergency response to the incident, including the name and address of any hospital, clinic or medical provider to which the person was transported following the AED use; and

512.2.4 Training Unit. Any AED possessed and used solely for demonstration or training purposes, and which would not be operational in an actual emergency use situation, shall be exempt from the registration requirements of this section. Any such AED shall be clearly marked on its exterior and readily identifiable as not appropriate for emergency use.

512.2.5 AED Sales. All persons selling an AED within the city, or which may reasonably be anticipated to be used within the city, shall:

512.2.5.1 Sale Notification. Report the sale of the AED to the Fire Department. The information to be reported shall include the date of the sale, the manufacturer, model and serial number of the AED sold, the name and address of the seller and name of the purchaser, whether the AED sold is new or previously used, and, if known, the location where the AED is to be placed; and

512.2.5.2 Transfer of Ownership. Require that the purchaser provide proof that it has or will have complied with the requirements of this ordinance at the time of transfer of the AED to the purchaser for deployment and use by the purchaser.

512.3 New Construction Requiring AED. At the time work begins on the site, an AED is required to be on site. Prior to issuance of Fire approval, an AED shall be placed in all Group A "Assembly" buildings with an occupancy load of 300 or more. In all other Occupancy Use

categories, an AED will be placed in buildings with an occupancy load of 200 or more.

Exception: 1. Single- or Multi-family dwelling units.
2 Parking Garages

512.4 Placement. AEDs shall be conspicuously placed and readily accessible in the event of an emergency. AEDs shall be mounted such that the top of the AED is no more than five (5) feet above the floor level.

512.5 Location. AEDs shall be located in buildings to optimally achieve a three minute response time to the person in need of emergency care using the AED. To achieve this separation, the first unit shall be placed in the following locations and other units placed accordingly to meet the intent of this code:

1. One AED shall be placed at the main entrance of every floor of the building.
2. AEDs shall be located on each floor such that the maximum length of travel measured from the most remote point on a floor to any AED shall not exceed 300 feet
3. AEDs shall be located on each floor such that the maximum length of travel between any two AEDs shall not exceed 600 feet.

Chapter 6: Building Services and Systems of the 2012 International Fire Code is amended as follows:

603.3.2.2 Restricted use and connection. Tanks installed in accordance with Section 603.3.2 shall be used only to supply fuel oil to fuel-burning ~~or generator~~ equipment installed in accordance with Section 603.3.2.4. Connections between tanks and equipment supplied by such tanks shall be made using closed piping systems.

Section 603.6.1 Masonry chimneys. Masonry chimneys that, upon inspection, are found to be without a flue liner and that have open mortar joints which will permit smoke or gases to ~~bed~~ be discharged into the building, or which are cracked as to be dangerous, shall be repaired or relined with a listed chimney liner system installed in accordance with the manufacturer's installation instructions or a flue lining system installed in accordance with the requirements of the International Building Code and appropriate for the intended class of chimney service.
Section 603.3.2.2; change to read as follows:

Section 604; change to read as follows:

SECTION 604
EMERGENCY AND STANDBY POWER SYSTEMS

604.1 Installation. Emergency and standby power systems required by this code or the *International Building Code* shall be installed in accordance with this code, NFPA 110 and 111. Existing installations shall be maintained in accordance with the original approval, except as specified in Chapter 11.

604.1.1 Stationary generators. Stationary emergency and standby power generators required by this code shall be *listed* in accordance with UL 2200.

604.1.2 Critical Operations Power Systems (COPS). For Critical Operations Power Systems necessary to maintain continuous power supply to facilities or parts of facilities that require continuous operation for the reasons of public safety, emergency management, national security, or business continuity, see NFPA 70.

604.2 Where required. Emergency and standby power systems shall be provided where required by Sections 604.2.1 through 604.2.18.4 604.2.24 or elsewhere identified in this code or any other referenced code.

604.2.1 Group A occupancies. Emergency voice/alarm communications systems. Emergency power shall be provided for emergency voice/alarm communications systems in Group A the following occupancies, or as specified elsewhere in this code, in accordance with Section 907.5.2.2.5 907.2.1.1.

Covered and Open Malls, Section 604.2.13
Group A occupancies, Sections 907.2.1.1 and 907.5.2.2.4.
Special Amusement buildings, Section 907.2.12.3
High rise buildings, Section 907.2.13
Atriums, Section 907.2.14
Deep Underground buildings, Section 907.2.19

604.2.2 Smoke control systems. Standby power shall be provided for smoke control systems in the following occupancies, or as specified elsewhere in this code, in accordance with Section 909.11:

Covered mall building, *International Building Code*, Section 404.5
Atriums, *International Building Code*, Section 404.7
Underground buildings, *International Building Code*, Section 405.5
Group I-3, *International Building Code*, Section 408.9
Stages, *International Building Code*, Section 410.3.7.2
Special Amusement buildings (as applicable to Group A's), *International Building Code*, Section 411.1
Smoke protected seating, Section 1028.6.2.1

604.2.3 Exit signs. Emergency power shall be provided for *exit* signs in accordance with Section 1011.6.3. (90 minutes)

604.2.4 Means of egress illumination. Emergency power shall be provided for *means of egress* illumination in accordance with Section 1006.3. (90 minutes)

604.2.5 Accessible means of egress elevators. Standby power shall be provided for elevators that are part of an *accessible means of egress* in accordance with Section 1007.4.

604.2.6 Accessible means of egress platform lifts. Standby power in accordance with this section or ASME A18.1 shall be provided for platform lifts that are part of an *accessible means of egress* in accordance with Section 1007.5

604.2.7 Horizontal sliding doors. Standby power shall be provided for horizontal sliding doors in accordance with Section 1008.1.4.3.

604.2.8 Semiconductor fabrication facilities. Emergency power shall be provided for semiconductor fabrication facilities in accordance with Section 2703.15.

604.2.9 Membrane structures. Emergency power shall be provided for *exit* signs in temporary tents and membrane structures in accordance with Section 3103.12.6.1. (90 minutes) Standby power shall be provided for auxiliary inflation systems in permanent membrane structures in accordance with the *International Building Code*. (4 hours)

604.2.10 Hazardous materials. Emergency or standby power shall be provided in occupancies with hazardous materials in accordance with Section 5004.7 and 5005.1.5.

604.2.11 Highly toxic and toxic materials. Emergency power shall be provided for occupancies with highly *toxic* or *toxic* materials in accordance with Sections 6004.2.2.8 and 6004.3.4.2.

604.2 12 Organic peroxides. Standby power shall be provided for occupancies with organic peroxides in accordance with Section 6204.1.11.

604.2.13 Covered and open mall buildings. (no change).

604.2.14 High-rise buildings. (no change).

604.2.15 Underground buildings. (no change).

604.2.16 Group I-3 occupancies. (no change).

604.2.17 Airport traffic control towers. (no change).

604.2.18 Elevators. (no change).

604.2.19 Smokeproof enclosures and Stair Pressurization Alternative. Standby power shall be provided for smokeproof enclosures, stair pressurization alternative and associated automatic fire detection systems as required by the *International Building Code*, Section 909.20.6.2.

604.2.20 Elevator pressurization. Standby power shall be provided for elevator pressurization system as required by the *International Building Code*, Section 909.21.5.

604.2.21 Elimination of Smoke Dampers in Shaft Penetrations. Standby power shall be provided when eliminating the smoke dampers in ducts penetrating shafts in accordance with the *International Building Code*, Section 717.5.3, exception 2.3.

604.2.22 Common exhaust systems for clothes dryers. Standby power shall be provided for common exhaust systems for clothes dryers located in multistory structures in accordance with the *International Mechanical Code* Section 504.8, item 7.

604.2.23 Hydrogen Cutoff Rooms. Standby power shall be provided for mechanical ventilation and gas detection systems of Hydrogen Cutoff Rooms in accordance with the *International Building Code*,

604.7 Emergency generators. Emergency generators shall also be electrically supervised for low battery conditions.

Chapter 7: Fire Resistance Rated Construction of the 2012 International Fire Code is amended as follows:

Section 704.1; change to read as follows:

704.1 Enclosure. Interior vertical shafts, including but not limited to *stairways*, elevator hoistways, service and utility shafts, that connect two or more stories of a building shall be enclosed or protected in accordance with the codes in effect at the time of construction but, regardless of when constructed, not less than as required in Chapter 11. New floor openings in existing buildings shall comply with the *International Building Code*.

Chapter 8: Interior Finish, Decorative Materials and Furnishings of the 2012International Fire Code is amended as follows:

Section 805 Upholstered Furniture and Mattresses in New and Existing Buildings of the 2009 International Fire Code is amended as follows:

~~**805.1.2.2 Heat release rate.** Newly introduced mattresses shall have limited rates of heat release when tested in accordance with ASTM E 1590 or California Technical Bulletin 129, as follows:~~

1. ~~The peak rate of heat release for the single upholstered furniture item shall not exceed 100 kW.~~
   ~~**Exception:** Mattresses in rooms or spaces protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1.~~
2. ~~The total energy released by the single upholstered furniture item during the first 5 10 minutes of the test shall not exceed 24 25 MJ.~~
   ~~**Exception:** Mattresses in rooms or spaces protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1.~~

Section 807.4.3.2; change to read as follows:

807.4.3.2 Artwork. Artwork and teaching materials shall be limited on the walls of corridors to not more than 20 percent of the wall area and on the walls of classrooms to not more than 50 percent of each wall area. Such materials shall not be continuous from floor to ceiling or wall to wall.
Curtains, draperies, wall hangings and other decorative material suspended from the walls or

ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

Exception: Corridors protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 shall be limited to 50 percent of the wall area.

Section 807.4.4.2; change to read as follows:

807.4.4.2 Artwork. Artwork and teaching materials shall be limited on the walls of corridors to not more than 20 percent of the wall area and on the walls of classrooms to not more than 50 percent of each wall area. Such materials shall not be continuous from floor to ceiling or wall to wall.
Curtains, draperies, wall hangings and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

Exception: Corridors protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 shall be limited to 50 percent of the wall area.

Chapter 9: Fire Protection Systems of the 2012 International Fire Code is amended as follows:

Section 901.6.1; Add Section 901.6.1.1 to read as follows:
901.6.1.1 Standpipe Testing. Building owners/managers must maintain and test standpipe systems as per NFPA 25 requirements. The following additional requirements shall be applied to the testing that is required every 5 years:

1. The piping between the Fire Department Connection (FDC) and the standpipe shall be hydrostatically tested for all FDC's on any type of standpipe system. Hydrostatic testing shall also be conducted in accordance with NFPA 25 requirements for the different types of standpipe systems.

2. For any manual (dry or wet) standpipe system not having an automatic water supply capable of flowing water through the standpipe, the tester shall connect hose from a fire hydrant or portable pumping system (as approved by the *fire code official*) to each FDC, and flow water through the standpipe system to the roof outlet to verify that each inlet connection functions properly. Confirm that there are no open hose valves prior to introducing water into a dry standpipe. There is no required pressure criteria at the outlet. Verify that check valves function properly and that there are no closed control valves on the system.

3. Any pressure relief, reducing, or control valves shall be tested in accordance with the requirements of NFPA 25. All hose valves shall be exercised.

4. If the FDC is not already provided with approved caps, the contractor shall install such caps for all FDC's as required by the *fire code official*.

5. Upon successful completion of standpipe test, place a blue tag (as per Texas Administrative Code, Fire Sprinkler Rules for Inspection, Test and Maintenance Service (ITM) Tag) at the bottom of each standpipe riser in the building. The tag shall be check-marked as "Fifth Year" for Type of ITM, and the note on the back of the tag shall read "5 Year Standpipe Test" at a minimum.

6. The procedures required by Texas Administrative Code Fire Sprinkler Rules with regard to Yellow Tags and Red Tags or any deficiencies noted during the testing, including the required notification of the local Authority Having Jurisdiction (*fire code official*) shall be followed.

7. Additionally, records of the testing shall be maintained by the owner and contractor, if applicable, as required by the State Rules mentioned above and NFPA 25.

8. Standpipe system tests where water will be flowed external to the building shall not be conducted during freezing conditions or during the day prior to expected night time freezing conditions.

9. Contact the *fire code official* for requests to remove existing fire hose from Class II and III standpipe systems where employees are not trained in the utilization of this firefighting equipment. All standpipe hose valves must remain in place and be provided with an approved cap and chain when approval is given to remove hose by the *fire code official*.

Section 901.7; change to read as follows:
901.7 Systems out of service. Where a required *fire protection system* is out of service or in the event of an excessive number of activations, the fire department and the *fire code official* shall be notified immediately and, where required by the *fire code official*, the building shall either be evacuated or an *approved fire watch* shall be provided for all occupants left unprotected by the shut down until the *fire protection system* has been returned to service.

Where utilized, fire watches shall be provided with at least one *approved* means for notification of the fire department and their only duty shall be to perform constant patrols of the protected premises and keep watch for fires.

901.11 Discontinuation or change of service. Notice shall be made to the fire code official whenever contracted alarm services for monitoring of any fire alarm system is terminated for any reason, or a change in alarm monitoring provider occurs. Notice shall be made in writing to the *fire code official* by the building owner and alarm service provider prior to the service being terminated.

Section 903 Automatic Sprinkler Systems of the 2012 International Fire Code is amended as follows:

903.1.2 Residential Systems. Unless specifically allowed by this code, residential sprinkler systems installed in accordance with NFPA 13D and NFPA 13R shall not be recognized for the

purposes of exceptions or reductions, commonly referred to as "trade-offs", permitted by other requirements of this code or the Building Code adopted by the City of Frisco.

903.2 Where required. *Approved automatic sprinkler systems* in new buildings and structures shall be provided in the locations described in Sections 903.2.1 through 903.2.12. Buildings on the same lot shall adhere to the combined aggregate sum of the total square feet. Separation on the same lot does not qualify as separate square footage. Automatic sprinklers shall be installed in elevator machine rooms and elevator machine spaces. Automatic sprinklers shall be installed in elevator hoistways where combustible materials are present or the elevator shaft is constructed of combustible construction. Storage shall not be allowed within the elevator machine room. Signage shall be provided at the entry doors to the elevator machine room indicating "ELEVATOR MACHINERY – NO STORAGE ALLOWED."

903.2.1 Group A. An *automatic sprinkler system* in accordance with Section 903.3.1 shall be provided throughout buildings and portions thereof used as Group occupancies as provided in this section. For Group A-1, A-2, A-3 and A-4 occupancies, the *automatic sprinkler system* shall be provided throughout the floor area where the Group A-1, A-2, A-3 or A-4 occupancy is located, and in all floors from the Group A occupancy to, and including, the nearest *level of exit discharge* serving the Group A occupancy. For Group A-5 occupancies, the *automatic sprinkler system* shall be provided in the spaces indicated in Section 903.2.1.5.

903.2.1.1 Group A-1. An *automatic sprinkler system* shall be provided for Group A-1 occupancies where one of the following conditions exists:

1. The *fire area* exceeds ~~12,000 square feet~~ 5,000 square feet (464.5 m 2) or is greater than two stories in height;
2. The *fire area* has an *occupant load* of 300 or more;
3. The *fire area* is located on a floor other than a *level of exit discharge* serving such occupancies.
4. The *fire area* contains a multitheater complex.

903.2.1.2 Group A-2. An *automatic sprinkler system* shall be provided for Group A-2 occupancies where one of the following conditions exists:

1. The *fire area* exceeds ~~5,000 square feet (464.5 m2)~~ 5,000 square feet (464.5 m2), or is greater than one stories in height;
2. The *fire area* has an occupant load of 100 or more;
3. The *fire area* is located on a floor other than a *level of exit discharge* serving such occupancies.

903.2.1.3 Group A-3. An automatic sprinkler system shall be provided for Group A-3 occupancies where one of the following conditions exists:

1. The *fire area* exceeds ~~12,000 square feet (1115 m2)~~ 5,000 square feet (464.5 m 2) or is greater than two stories in height;
2. The *fire area* has an occupant load of 300 or more; or

3. The *fire area* is located on a floor other than a *level of exit discharge* serving such occupancies.

903.2.1.4 Group A-4. An automatic sprinkler system shall be provided for Group A-4 occupancies where one of the following conditions exists:

1. The fire area exceeds ~~12,000 square feet (1115 m a)~~ 5,000 square feet (464.5 m) or is greater than two stories in height.
2. The fire area has an occupant load of 300 or more.
3. The *fire area* is located on a floor other than a *level of exit discharge* serving such occupancies.

903.2.2.1 Group B An automatic sprinkler system shall be provided for Group B occupancies where on the following condition exists:

1. Where the fire area exceeds 5,000 square feet.

903.2.3 Group E. An automatic sprinkler system shall be provided throughout entire buildings containing a ~~for~~ Group E fire area ~~occupancies as follows~~.

~~1. Throughout all Group E *fire areas* greater than 12,000 square feet (1115 m2) in area.~~
~~2. Throughout every portion of educational buildings below the lowest *level of exit discharge* serving that portion of the building.~~

~~**Exception:** An *automatic sprinkler system* is not required in any area below the lowest *level of exit discharge* serving that area where every classroom throughout the building has at least one exterior *exit* door at ground level.~~

903.2.4 Group F-1. An automatic sprinkler system in accordance with Section 903.3.1 shall be provided throughout all buildings containing a Group F-1 occupancy where ~~one of the following conditions exists~~ the fire area exceeds 5,000 square feet (464.5m2).

~~1. A Group F-1 *fire area* exceeds 12,000 square feet (1115 m2).~~
~~2. A Group F-1 *fire area* is located more than three stories above grade plane.~~
~~3. The combined area of all Group F-1 *fire areas* on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m2).~~

903.2.6 Group I. An automatic sprinkler system in accordance with Section 903.3.1.1 shall be provided throughout buildings with a Group I fire area.

~~**Exceptions:**~~
~~1. An *automatic sprinkler system* installed in accordance with Section 903.3.1.2 shall be permitted in Group I-1 facilities.~~
~~2. An *automatic sprinkler system* installed in accordance with Section 903.3.1.3 shall be allowed in Group I-1 facilities when in compliance with all of the following:~~
~~2.1. A hydraulic design information sign is located on the system riser;~~
~~2.2. Exception 1 of Section 903.4 is not applied; and~~

~~2.3. Systems shall be maintained in accordance with the requirements of Section 903.3.1.2.~~
~~3. An *automatic sprinkler system* is not required where day care facilities are at the *level of exit discharge* and where every room where care is provided has at least one exterior *exit* door.~~
~~4. In buildings where Group I-4 day care is provided on levels other than the *level of exit discharge*, an *automatic sprinkler system* in accordance with Section 903.3.1.1 shall be installed on the entire floor where care is provided and all floors between the level of care and the *level of exit discharge*, all floors below the level of exit discharge, other than areas classified as an open parking garage.~~

903.2.7 Group M. An automatic sprinkler system in accordance with Section 903.3.1.1 shall be provided throughout buildings containing a Group M where the Group M fire area exceeds 5,000 square feet (465 m2). A Group M Occupancy used for the display and sale of upholstered furniture must have an automatic sprinkler system installed regardless of square footage

~~1. A Group M *fire area* exceeds 12,000 square feet (1115 m2).~~
~~2. A Group M *fire area* is located more than three stories above grade plane.~~
~~3. The combined area of all Group M *fire areas* on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m2).~~
~~4. A Group M occupancy is used for the display and sale of upholstered furniture exceeds 5,000 square feet.~~

903.2.8.3 Group R additions. Group R occupancies that would require an automatic sprinkler system due to additions or remodeling must add automatic sprinkler systems to those areas that are additions or alterations of the original structure.

903.2.9 Group S-1. An automatic sprinkler system in accordance with Section 903.3.1.1 shall be provided throughout all buildings containing a Group S-1 occupancy. ~~occupancy where one of the following conditions exists:~~
~~1. A Group S-1 *fire area* exceeds 12,000 square feet (1115 m2).~~
~~2. A Group S-1 *fire area* is located more than three stories above grade plane.~~
~~3. The combined area of all Group S-1 *fire areas* on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m2).~~
~~4. A Group S-1 *fire area* used for the storage of commercial trucks or buses where the *fire area* exceeds 5,000 square feet (464 m2).~~

903.2.9.1 Repair garages. An *automatic sprinkler system* shall be provided throughout all buildings used as repair garages in accordance with Section 406 of the *International Building Code* ~~, as shown:~~

~~(~~Items 1 through 4 deleted)

~~1. Buildings having two or more stories above grade plane, including *basements*, with a *fire area* containing~~
~~a repair garage exceeding 10,000 square feet (929 m2).~~

~~2. Buildings no more than one story above grade plane, with a *fire area* containing a repair garage exceeding 12,000 square feet (1115 m2).~~
~~3. Buildings with repair garages servicing vehicles parked in *basements*.~~
~~4. A Group S-1 *fire area* used for the repair of commercial trucks or buses where the *fire area* exceeds 5,000 square feet (464 m2).~~

903.2.9.3 Self service storage facilities. An automatic sprinkler system shall be installed throughout all buildings containing a Group S-1 self service storage facility.
A screen shall be installed at eighteen (18) inches below the level of the sprinkler heads to restrict storage above that level. The screen shall be a mesh of not less than one (1) inch nor greater than six (6) inches in size. The screen and its supports shall be installed such that all elements are at least eighteen (18) inches below any sprinkler heads.

903.2.10 Group S-2 enclosed parking garages. An *automatic sprinkler system* shall be provided throughout buildings classified as enclosed parking garages in accordance with Section ~~311~~ 406.4.1of the *International Building Code* as follows:
1. Where the *fire area* of the enclosed parking garage exceeds ~~12,000 square feet (1115 m2)~~; 5,000 square feet (1115 m2) or
2. Where the enclosed parking garage is located beneath and/or attached to other occupancy groups.
~~Exception:~~ ~~Enclosed parking garages located beneath Group R-3 occupancies.~~

903.2.10.2 Group S-2 open parking garages. An *automatic sprinkler system* shall be provided throughout buildings classified as ~~enclosed~~ open parking garages in accordance with Section 406.3 of the *International Building Code* as follows:

1. Where the open parking garage is located beneath and/or attached to other occupancy groups.

903.2.11 Specific building areas and hazards. In all occupancies an *automatic sprinkler system* shall be installed for building design or hazards in the locations set forth in Sections 903.2.11.1 through 903.2.11.6.

Exception: ~~Groups R-3~~ and U

903.2.11.3 Buildings ~~55~~ 35 feet or more in height. An *automatic sprinkler system* shall be installed throughout buildings with a floor level having an *occupant load* of 30 or more that is located ~~55~~ 35 feet (16 764 mm) or more above the lowest level of fire department vehicle access.
Exceptions:
~~1. Airport control towers.~~
~~2. Open parking structures.~~
~~3. Occupancies in Group F-2.~~

903.2.11.7 New and Existing buildings. Automatic sprinkler systems shall be installed:
1. In all new buildings with a gross floor area of 5,000 square feet or greater and/or greater than two stories in height.
2. In existing buildings when additions are made that increase the gross floor area to 5,000

square or greater and/or greater than two stories in height.
3. In existing buildings with a gross floor area greater than 5,000 square feet when any alteration is made affecting thirty percent (30%) or more of the building.

903.2.11.8 Spray Booths and Rooms. New spray booths and spraying rooms shall be protected by an approved automatic fire-extinguishing system.

903.3.1 Standards. Sprinkler systems shall be designed and installed in accordance with Sections 903.3.1.1, 903.3.1.2 or 903.3.1.3. Sprinkler systems shall be designed and installed in accordance with NFPA 13 as amended and NFPA 13R as amended by the City of Frisco.

903.3.1.1.1 Exempt locations. Automatic sprinklers ~~shall~~ may be exempted from ~~not be required in~~ the following rooms or areas when specifically permitted by the fire *code* official and where such rooms or areas are protected with an approved automatic fire detection system in accordance with Section 907.2 that will respond to visible or invisible particles of combustion and such rooms meet other requirements as determined by the fire *code* official. Sprinklers shall not be omitted from any room merely because it is damp, of fire resistance rated construction or contains electrical equipment.
1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard.
2. Any room or space where sprinklers are considered undesirable because of the nature of the contents, when approved by the fire code official.
3. Generator and transformer rooms separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fire-resistance rating of not less than 2 hours.
4. In rooms or areas that are of noncombustible construction with wholly noncombustible contents.
5. Fire service access elevator machine rooms and machinery spaces.

903.3.1.2. NFPA 13R sprinkler systems.. *Automatic sprinkler systems* in Group R occupancies up to and including four stories in height shall be permitted to be installed throughout in accordance with NFPA 13R Unless specifically allowed by this code, residential sprinkler systems installed in accordance with NFPA 13R shall not be recognized for the purposes of exceptions or reductions commonly referred to as "tradeoffs", permitted by other requirements of this code or the Building Code adopted by the City of Frisco. In addition, residential sprinkler systems installed in accordance with NFPA 13R must include attic sprinkler protection to be recognized for the purposes of such trade-offs permitted by other sections of this code.

903.3.1.2.1 Balconies and decks. Sprinkler protection shall be provided for exterior balconies, decks and ground floor patios of dwelling units. ~~where the building is of Type V construction, provided there is a roof or deck above.~~ Sidewall sprinklers that are used to protect such areas shall be permitted to be located such that their deflectors are within 1 inch (25mm) to 6 inches (152 mm) below the structural members and a maximum distance of 14 inches (356 mm) below the deck of the exterior balconies and decks that are constructed of open wood joist construction.

903.3.1.3 NFPA 13D sprinkler systems. Automatic sprinkler systems installed in one- and two-family dwellings and townhouses shall be permitted to be installed throughout in accordance

with NFPA 13D. Unless specifically allowed by this code, residential sprinkler systems installed in accordance with NFPA 13D shall not be recognized for the purposes of exceptions or reductions commonly referred to as "tradeoffs", permitted by other requirements of this code or the Building Code adopted by the City of Frisco

903.3.5. Water supplies. Water supplies for automatic sprinkler systems shall comply with this section and the standards referenced in section 903.3.1.1. The potable water supply shall be protected against backflow in accordance with the requirements of this section and the *International Plumbing Code* as adopted by the City of Frisco. Water supply as required for such systems shall be provided in conformance with the supply requirements of the respective standards; however, every fire protection system shall be designed with a 10-psi safety factor.

~~**Section 903.3.5.1, and 903.3.5.1.1,903.5.1.2**~~ **and** ~~-~~**903.5.2 are deleted in their entirety**

Add Section 903.3.5.1 One and Two-Family dwelling combination services. A single combination water supply shall be allowed as required by NFPA 13D, and the International Plumbing Code.

~~**903.3.5.1.2 Delete in its entirety**~~

~~**903.3.5.2 Secondary water supply.** A secondary on-site water supply equal to the hydraulically calculated sprinkler demand, including the hose stream requirement, shall be provided for high-rise buildings in Seismic Design Category C, D, E or F as determined by the *International Building Code*. The secondary water supply shall have a duration of not less than 30 minutes as determined by the occupancy hazard classification in accordance with NFPA 13.~~

~~**Exception:** Existing buildings~~.

903.4 Sprinkler system supervision and alarms. All valves controlling the water supply for *automatic sprinkler systems*, pumps, tanks, water levels and temperatures, critical air pressures and water-flow switches on all sprinkler systems shall be electrically supervised by a *listed* fire alarm control unit.

Exceptions:

1. ~~*Automatic sprinkler systems* protecting one- and two family *dwellings*~~
~~2. Limited area systems serving fewer than 20 sprinklers.~~
~~3. *Automatic sprinkler systems* installed in accordance with NFPA 13R where a common supply main is used to supply both domestic water and the *automatic sprinkler system*, and a separate shutoff valve for the *automatic sprinkler system* is not provided.~~
4. Jockey pump control valves that are sealed or locked in the open position.
~~5. Control valves to commercial kitchen hoods, paint spray booths or dip tanks that are sealed or locked in the open position.~~
6. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.
7. Trim valves to pressure switches in dry, preaction and deluge sprinkler systems that are sealed

or locked in the open position.

Automatic sprinkler systems protecting one and two family dwellings are required to be monitored for a waterflow condition for each system. Sprinkler and standpipe system water-flow detectors shall be provided for each floor tap to the sprinkler system and shall cause an alarm upon detection of water flow for more than 45 seconds. All control valves in the sprinkler and standpipe systems except for the fire department hose connection valves shall be electrically supervised to initiate a supervisory signal at the central station upon tampering.

903.4.2Alarms. *Approved* audible devices shall be connected to every *automatic sprinkler system*. Such sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Alarm devices shall be provided on the exterior of the building in an *approved* location. Where a fire alarm system is installed, actuation of the *automatic sprinkler system* shall actuate the building fire alarm system. At least one approved audible sprinkler flow alarm to alert the occupants shall be provided in the interior of the building in a normally occupied location. An approved listed mechanical alarm shall be connected to every automatic sprinkler system. No electrically operated appliance shall be used.

Section 905 Standpipe Systems of the 2012 International Fire Code is amended as follows:

905.2 Installation standards. Standpipe systems shall be installed in accordance with this section and NFPA 14. Manual dry systems shall be supervised with a minimum of 10 psig and maximum of 40 psig air pressure with a high/low alarm. Manual dry systems can be installed when the buildings do not exceed four stories in height from the level of the fire apparatus access road and when approved by the *fire code official*.

905.3.1. ~~Height~~ Floor Area. Class I standpipe systems shall be installed throughout buildings where the floor area is greater than ten thousand (10,000) square feet per floor or the floor level of the highest story is located more than 30 feet (9144 mm) above the lowest level of the fire department vehicle access, or where the floor level of the lowest story is located below the highest level of fire department vehicle access.

To determine the lowest level of fire department vehicle access, it shall not be required to consider recessed loading docks for four (4) or less vehicles and conditions where topography makes access from the fire department vehicle to the building impractical or impossible.

Exception

1. Group U Occupancies

2. Where the building is determined to meet section 503.1.1 by the fire code official, standpipe outlets can be provided as required by the *fire code official*.

Strike remaining exceptions

Amend Section 905.3.3 Item #5 to read as follows:
5. At other locations as necessary so that the distance to reach all portions of a tenant spaces does not exceed ~~200 feet (60 960 mm)~~ 150 feet (45 720mm) as the hose would be laid from a hose connection.

905.4 Location of Class I standpipe hose connections. Class I standpipe hose connections shall be provided in all of the following locations:
1. In every required *stairway*, a hose connection shall be provided for each floor level above or below grade. Hose connections shall be located at an intermediate floor level landing between floors, unless otherwise *approved* by the *fire code official*.
2. On each side of the wall adjacent to the *exit* opening of a horizontal *exit*.
Exception: Where floor areas adjacent to a horizontal *exit* are reachable from *exit stairway* hose connections by a 30-foot (9144 mm) hose stream from a nozzle attached to 100 feet (30 480 mm) of hose, a hose connection shall not be required at the horizontal *exit*. In every *exit* passageway, at the entrance from the exit passageway to other areas of a building.
3. In every *exit* passageway, at the entrance from the exit passageway to other areas of a building.
Exception: Where floor areas adjacent to an exit passageway are reachable from *exit stairway* hose connections by a 30-foot (9144 mm) hose stream from a nozzle attached to 100 feet (30 480 mm) of hose, a hose connection shall not be required at the entrance from the exit passageway to other areas of the building.
4. In covered mall buildings, adjacent to each exterior public entrance to the mall and adjacent to each entrance from an *exit* passageway or *exit corridor* to the mall.
~~1 through 4 remain the same~~
5. Where the roof has a slope less than four units vertical in 12 units horizontal (33.3-percent slope), each standpipe shall be provided with a <u>two way</u> hose connection located either on the roof or at the highest landing of a *stairway* with stair access to the roof. An additional hose connection shall be provided at the top of the most hydraulically remote standpipe for testing purposes.
6. Where the most remote portion of a non-sprinklered floor or story is more than 150 feet as the hose would be laid (45 720 mm) from a hose connection or the most remote portion of a sprinklered floor or story is more than ~~200~~ <u>150</u> feet <u>as the hose would be laid</u> (60 960 mm) from a hose connection, the *fire code official* is authorized to require that additional hose connections be provided in *approved* locations.

Section 906 Portable Fire Extinguishers of the 2012 International Fire Code is amended as follows:

906.1 Where required. Portable fire extinguishers shall be installed in the following locations.
1. In new and existing Group A, B, E, F, H, I, M, R-1, R-2, R-4 and S occupancies.
Exception: In Group R-2 occupancies, portable fire extinguishers shall be required only in locations specified in Items 2 through 6 where each *dwelling unit* is provided with a portable fire extinguisher having a minimum rating of 1-A:10-B:C.
2. Within 30 feet (9144 mm) of commercial cooking equipment.
3. In areas where flammable or *combustible liquids* are stored, used or dispensed.

4. On each floor of structures under construction, except Group R-3 occupancies, in accordance with Section 3315.1.
5. Where required by the sections indicated in Table 906.1.
6. Special-hazard areas, including but not limited to laboratories, computer rooms and generator rooms, where required by the *fire code official*

.**Section 907 Fire Alarms and Detection Systems** of the 2012 International Fire Code is be amended as follows:

907.1.3.1 Design Standards. All new or replacement alarm systems serving alarm actuating devices shall be addressable fire detection systems. Alarm system serving more than twenty (20) smoke detectors or more than 200 total alarm activating devices shall be analog intelligent addressable fire detection systems.

Exception: Existing systems need not comply unless the total building remodel or expansion initiated after the effective date of this code, as adopted, exceeds thirty percent (30%) of the building remodel or expansion exceeds fifty percent (50%) of the building. Such systems must comply within twelve (12) months of the permit application date.

907.2.1 Group A. A manual fire alarm system that activates the occupant notification system in accordance with new Section 907.6 shall be installed in Group A occupancies having an occupant load of 300 or more persons or more than 100 persons above or below the lowest level of exit discharge. Group occupancies not separated from one another in accordance with Section 707.3.10 of the *International Building Code* shall be considered a single occupancy for the purposes of applying this section. Portions of Group E occupancies occupied for assembly purposes shall be provided with a fire alarm system as required for the Group E occupancy.

Exception: Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 and the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.

Activation of fire alarm notification appliances shall:
1. Cause illumination of the means of egress with light of not less than 1 foot-candle (11 lux) at the walking surface level, and
2. Stop any conflicting or confusing sounds and visual distractions.

907.2.3 Group E. A manual fire alarm system that initiates the occupant notification signal utilizing emergency voice/alarm communication system meeting the requirements of Section 907.6 shall be installed in Group E educational occupancies. When automatic sprinkler systems or smoke detectors are installed, such systems or detectors must be connected to the building fire alarm system. An approved smoke detection system shall be installed in Group E day care occupancies. Unless separated by a minimum of 100 feet open space, all buildings, whether portable buildings or the main building will be considered one building for alarm occupant load consideration and interconnection of alarm systems.

Section 907.2.3 Group E; Delete All exceptions

907.2.8 Group R-1 Fire alarm systems and smoke alarms shall be installed in Group R-1 occupancies as required in sections 907.2.8.1 through 907.2.8.3.

907.2.8.1 Manual fire alarm system. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.6 shall be installed in Group R-1 occupancies.

907.2.8.1 Delete exception #1.

Exceptions:

~~1. A manual fire alarm system is not required in buildings not more than two stories in height where all individual *sleeping units* and contiguous attic and crawl spaces to those units are separated from each other and public or common areas by at least 1-hour *fire partitions* and each individual *sleeping unit* has an *exit* directly to a *public way*, *exit court* or yard.~~

1. Manual fire alarm boxes are not required throughout the building when the following conditions are met:
    2.1. The building is equipped throughout with an *automatic sprinkler system* installed in accordance with Section903.3.1.1 or 903.3.1.2;
    2.2. The notification appliances will activate upon sprinkler water flow; and
    2.3. At least one manual fire alarm box is installed at an *approved* location.

Add 907.2.8.1.1 Guest Rooms. Manual fire alarm boxes shall be installed in all interior and exterior corridors serving guest rooms.

907.2.9 Group R-2. Fire alarm systems and smoke alarms shall be installed in Group R-2 occupancies as required in Section 907.2.9.1 and 907.2.9.2.

907.2.9.1 Manual fire alarm system. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.6 shall be installed in Group R-2 occupancies.

~~1. Any *dwelling unit* or *sleeping unit* is located three or more stories above the lowest *level of exit discharge*;~~

~~2. Any *dwelling unit* or *sleeping unit* is located more than one story below the highest *level of exit discharge* of *exits* serving the *dwelling unit* or *sleeping unit*; or~~

~~3. The building contains more than 16 *dwelling units* or *sleeping units*.~~

Exceptions:

~~1. A fire alarm system is not required in buildings not more than two stories in height where all *dwelling units* or *sleeping units* and contiguous attic and crawl spaces are separated from each other and public or common areas by at least 1-hour *fire partitions* and each *dwelling unit* or *sleeping unit* has an *exit* directly to a *public way*, *exit court* or yard.~~

2. Manual fire alarm boxes are not required where the building is equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2 and the occupant notification appliances will automatically activate throughout the notification zones upon a sprinkler water flow.

~~3. A fire alarm system is not required in buildings that do not have interior *corridors* serving~~

~~*dwelling units* and are protected by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2, provided that *dwelling units* either have a *means of egress* door opening directly to an exterior *exit access* that leads directly to the *exits* or are served by open-ended *corridors* designed in accordance with Section 1026.6, Exception~~

907.2.13 High-rise buildings. Buildings with a floor used for human occupancy located more than ~~75 feet (22 860 mm)~~ 55 feet (16 764mm) above the lowest level of fire department vehicle access shall be provided with an automatic smoke detection system in accordance with Section 907.2.13.1, a fire department communication system in accordance with Section 907.2.13.2 and an emergency voice/alarm communication system in accordance with Section 907.5.2.2.

Exceptions:

3. Buildings with an occupancy in Group A-5 in accordance with Section 303.1 of the *International Building Code*; when used for open air seating; however, this exception does not apply to accessory uses including but not limited to sky boxes, restaurants and similarly enclosed spaces.

Add 907.4.2.7 Type. Manual alarm initiating devices shall be an approved double action type.

Add 907.6.1.1 Installation. All fire alarm systems shall be installed in such a manner that a failure of any single initiating device or single open in an initiating circuit conductor will not interfere with the normal operation of other such devices. All signaling line circuits (SLC) shall be installed in such a way that a single open will not interfere with the operation of any addressable devices (Class A). Outgoing and return SLC conductors shall be installed in accordance with NFPA 72 requirements for Class A circuits and shall have a minimum of four feet separation horizontal and one foot vertical between supply and return circuit conductors. The initiating device circuit from an addressable input (monitor) module may be wired Class B provided the distance from the addressable module to the initiating device is 10-feet or less.

907.6.3.2 High-rise buildings. In high-rise buildings, 55 feet (16 764 mm) or greater in height, a separate zone by floor shall be provided for each of the following types of alarm-initiating devices where provided:

1. Smoke detectors.
2. Sprinkler water-flow devices.
3. Manual fire alarm boxes.
4. Other *approved* types of automatic fire detection devices or suppression systems.

Add 907.6.5.3 Communication requirements. All alarm systems, new or replacement shall transmit alarm, supervisory and trouble signals descriptively to the approved central station, remote supervisory station or proprietary supervising station as defined in NFPA 72, with the correct device designation and location of addressable device identification. Alarms shall not be permitted to be transmitted as a General Alarm or Zone condition.

Section 910.1; change Exception 2 to read as follows*:*

Where areas of buildings are equipped with early suppression fast-response (ESFR) sprinklers, ~~automatic~~ only manual smoke and heat vents shall ~~not~~ be required within these areas. Automatic smoke and heat vents are prohibited.

Section 910.2; add subsections 910.2.3 with exceptions and 910.2.4 to read as follows:
910.2.3 Group H. Buildings and portions thereof used as a Group H occupancy as follows:

1. In occupancies classified as Group H-2 or H-3, any of which are more than 15,000 square feet (1394 m2) in single floor area.
Exception:
Buildings of noncombustible construction containing only noncombustible materials.

2. In areas of buildings in Group H used for storing Class 2, 3, and 4 liquid and solid oxidizers, Class 1 and unclassified detonable organic peroxides, Class 3 and 4 unstable (reactive) materials, or Class 2 or 3 water-reactive materials as required for a high-hazard commodity classification.

Exception: Buildings of noncombustible construction containing only noncombustible materials.

910.2.3 Exit access travel distance increase. Buildings and portions thereof used as a Group F-1 or S-1 occupancy where the maximum exit access travel distance is increased in accordance with Section 1016.3.

Table 910.3; Change the title of the first row of the table 910.3 from "Group F-1 and S-1" to include "Group H" and to read as follows:
Group H, F-1 and S-1

Section 910.3.2.2; add second paragraph to read as follows:
The automatic operating mechanism of the smoke and heat vents shall operate at a temperature rating at least 100 degrees F (approximately 38 degrees Celsius) greater than the temperature rating of the sprinklers installed.

Add 912.1.1 Combination Connections.
912.1.1 Combination 5" diameter Storz and Siamese fire department connections shall be provided on all manual dry standpipes.

Section 912.2; update Section 912.2.1 to read as follows:
Section 912.2.1 Visible Location. Fire department connections shall be located on the street side of buildings, fully visible, recognizable and within fifty (50) feet of the street or nearest point of fire department vehicle access (fire lane) or as otherwise *approved* by the *fire code official*.

Section 912.2; add Section 912.2.3 to read as follows:
912.2.3 Hydrant distance. An approved fire hydrant shall be located within 100 feet of the fire department connection as the fire hose lays.
912.7 Fire Department Connection Caps. . All Fire Department Connections, FDC's, shall be metal threaded caps to prevent vandalism and tampering.

****Section 913.1; add second paragraph and exception to read as follows:**
When located on the ground level at an exterior wall, the fire pump room shall be provided with an exterior fire department access door that is not less than 3 ft. in width and 6 ft. – 8 in. in height, regardless of any interior doors that are provided. A key box shall be provided at this door, as required by Section 506.1.

Exception: When it is necessary to locate the fire pump room on other levels or not at an exterior wall, the corridor leading to the fire pump room access from the exterior of the building shall be provided with equivalent fire resistance as that required for the pump room, or as approved by the *fire code official*. Access keys shall be provided in the key box as required by Section 506.1.

913.4 Valve Supervision.
Delete Item #3 and Item #4 in its entirety

913.4 Valve supervision. Where provided, the fire pump suction, discharge and bypass valves, and the isolation valves on the backflow prevention device or assembly shall be supervised open by one of the following methods.
1. Central-station, proprietary or remote-station signaling service.
2. Local signaling service that will cause the sounding of an audible signal at a constantly attended location.
~~3. Locking valves open~~.
~~4. Sealing of valves and *approved* weekly recorded inspection where valves are located within fenced enclosures under the control of the *owner*.~~

914.3.1 Automatic Sprinkler System
Delete Exception Item #2 in its entirety
914.3.1 Automatic sprinkler system. Buildings and structures shall be equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 and a secondary water supply where required by Section 903.3.5.2.

Exception: An *automatic sprinkler system* shall not be required in spaces or areas of:
1. Open parking garages in accordance with Section 406.5 of the *International Building Code*.
~~2. Telecommunications equipment buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries and standby engines, provided that those spaces or areas are equipped throughout with an automatic fire detection system in accordance with Section 907.2 and are separated from the remainder of the building by not less than 1-hour *fire barriers* constructed in accordance with Section 707 of the *International Building Code* or not less than 2-hour *horizontal assemblies* constructed in accordance with ection 712 of the *International Building Code*, or both.~~
Chapter 10: Means of Egress of the 2012 International Fire Code is amended as follows:

Section 1004 *Occupant Load* of the 2012 International Fire Code is amended as follows:

1004.1.2 Areas without fixed seating.

~~Exception: Where *approved* by the building official, the actual number of occupants for whom each occupied space, floor or building is designed, although less than those determined by calculation, shall be permitted to be used in the determination of the design *occupant load*.~~

Section 1008.1.9.4; amend exceptions 3 and 4 as follows:
Exceptions: *…{Text of Exceptions 1 and 2 unchanged}…*
3. Where a pair of doors serves an *occupant load* of less than 50 persons in Group B, F, M or S occupancy, manually operated edge- or surface- mounted bolts are permitted on the inactive leaf. The inactive leaf shall contain no doorknobs, panic bars or similar operating hardware.
4. Where a pair of doors serves a Group B, F, M or S occupancy manually operated edge- or surface- mounted bolts are permitted on the inactive leaf provided such inactive leaf is not needed to meet egress width requirements and the building is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1. The inactive leaf shall contain no doorknobs, panic bars or similar operating hardware.

5. *…{text unchanged}…*

~~***Section 1015; add new section 1015.7 to read as follows:***~~
~~**1015.7 Electrical Rooms.** For electrical rooms, special exiting requirements may apply. Reference the electrical code as adopted.~~

Section 1016 Corridors Exit Access Travel Distance of the 2012 International Fire Code is amended as follows:

Table 1016.1 Exits Access Travel Distance of the 2012 International Fire Code is amended as follows:**Table 1016.1**
Exit Access Travel Distance[a]

OCCUPANCY	WITHOUT SPRINKLER SYSTEM (feet)	WITH SPRINKLER SYSTEM[b] (feet)
A, E, F-1, M, R, S-1	200	250c
I-1	Not Permitted	250c
B	200	300[c]
F-2, S-2, U	300	400[c]
H-1	Not Permitted	75[c]
H-2	Not Permitted	100[c]
H-3	Not Permitted	150[c]
H-4	Not Permitted	175[c]
H-5	Not Permitted	200[c]
I-2, I-3, I-4	150	200c

For SI: 1 foot = 304.8 mm.
a. See the following sections for modifications to exit access travel distance requirements:
Section 402.4 of the *International Building Code*: For the distance limitation in malls.
Section 404.9 of the *International Building Code*: For the distance limitation through an atrium space.
Section 407.4 of the *International Building Code* : For the distance limitation in Group I-2.
Sections 408.6.1 and 408.8.1 of the *International Building Code*: For the distance limitations in Group I-3.
Section 411.4 of the *International Building Code*: For the distance limitation in special amusement buildings.
Section 1014.2.2: For the distance limitation in Group I-2 hospital suites.
Section 1015.4: For the distance limitation in refrigeration machinery rooms.
Section 1015.5: For the distance limitation in refrigerated rooms and spaces.
Section 1021.2: For buildings with one exit.

Section 1028.7: For increased limitation in assembly seating.
Section 1028.7: For increased limitation for assembly open-air seating.
Section 3103.4 of the *International Building Code*: For temporary structures.
Section 3104.9 of the *International Building Code*: For pedestrian walkways.
~~b. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2. See Section 903 for occupancies where automatic sprinkler systems in accordance with Section 903.3.1.2 are permitted.~~
c. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

~~**Exception**: Group I-1 occupancies.~~

1018.4 Dead ends. Where more than one *exit* or *exit access* doorway is required, the exit access shall be arranged such that there are no dead ends in *corridors* more than 20 feet (6096 mm) in length.

Exceptions:

~~1. In occupancies in Group I-3 of Occupancy Condition 2, 3 or 4 (see Section 308.4), the dead end in a corridor shall not exceed 50 feet (15 240 mm).~~

~~2. In occupancies in Groups B,E,F,I-1,M,R-1,R-2,R-4,S-U where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, the length of dead-end corridors shall not exceed 50 feet (15 240 mm).~~

1. A dead-end corridor shall not be limited in length where the length of the dead-end *corridor* is less than 2.5 times the least width of the dead-end *corridor*.

Section 1022 ~~Vertical~~ Exit Enclosures of the 2012 International Fire Code is amended as follows:
Section 1022.1; add exceptions 8 and 9 to read as follows:

Section 1025 Horizontal Exits,

1025.2 Separation of the 2012 International Fire Code is amended as follows:

1025.2 Separation. The separation between buildings or refuge areas connected by a *horizontal exit* shall be provided by a *fire wall* complying with Section 706 of the *International Building Code*; or it shall be provided by a *fire barrier* complying with Section 707 of the *International Building Code* or a *horizontal assembly* complying with Section 712 of the *International Building Code*, or both. The minimum *fire-resistance rating* of the separation shall be 2 hours. Opening protectives in *horizontal exits* shall also comply with Section 715 of the *International Building Code*. Duct and air transfer openings in a *fire wall* or *fire barrier* that serves as a *horizontal exit* shall also comply with Section 716 of the *International Building Code*.
The *horizontal exit* separation shall extend vertically through all levels of the building unless floor assemblies have a *fire-resistance rating* of not less than 2 hours with no unprotected openings.
Delete the Exception.

~~**Exception:** A *fire-resistance rating* is not required at *horizontal exits* between a building area and an above-grade *pedestrian walkway* constructed in accordance with Section 3104 of the *International Building Code*, provided that the distance between connected buildings is more than 20 feet (6096 mm).~~

Horizontal exits constructed as *fire barriers* shall be continuous from *exterior wall* to *exterior wall* so as to divide completely the floor served by the *horizontal exit*.

Section 1026 Exterior exit stairways and ramps of the 2012 International Fire Code is amended as follows:

1026.6 Exterior stairway and ramp protection. Exterior exit stairways and ramps shall be separated from the interior of the building as required in Section 1022.2. Openings shall be limited to those necessary for the egress from normally occupied space.

Exceptions: *…{Exceptions 1 through 3 unchanged}…*
4. Separation from the open-ended *corridors* of the building … *{remaining text unchanged}…*

Section 1029.1; amend exception 1 to read as follows:

1029.1 General.

Exception:-------

1. In other than Group R-3 occupancies, buildings equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1~~ or 903.3.1.2.~~

Section 1030.2; change to read as follows:
1030.2 Reliability. Required exit accesses, exits, or exit discharges shall be continuously maintained free from obstructions or impediments to full instant use in the case of fire or other emergency ~~when these areas served by such exits are occupied~~. Security devices affecting means of egress shall be subject to approval of the fire code official.
Chapter 11 Construction Requirements for Existing Buildings of the 2012 International Fire Code is amended as follows:

Table 4604.7 is amended as follows:

TABLE 4604.7
EGRESS WIDTH PER OCCUAPNT SERVED

	WITHOUT SPRINKLER SYSTEM		WITH FIRE SPRINKLER SYSTEM[a]	
	Stairways	Other egress components	Stairways	Other egress components

Occupancy	(inches per occupant)	(inches per occupant)	(inches per occupant)	(inches per occupant)
Occupancies other than those listed below	**0.3**	**0.2**	**~~0.2~~ 0.3**	**~~0.15~~ 0.2**
Hazardous: H-1 H-2, H-3 and H-4	**Not permitted**	**Not permitted**	**0.3**	**0.2**
Institutional: I-2	**Not permitted**	**Not permitted**	**0.3**	**0.2**

For SI: 1 inch = 25.4 mm. NA = Not applicable.

a. Buildings constructed under the 2003 or 2006 IBC and equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.

Section 1103.3; add sentence to end of paragraph as follows:

Provide emergency signage as required by Section 607.2

Chapter 14: Fire Safety During Construction and Demolition of the 2012 International Fire Code is amended as follows:

Section 1411 Means of Egress of the 2012 International Fire Code is amended as follows:

1411.3 Stairway floor number signs. Temporary stairway floor number signs shall be provided. The sign shall be a minimum size of 18 inches by 12 inches. The number designating the floor level shall be a minimum of 5 inches in height and located in the center of the sign. The sign shall be located 5 feet above the floor landing in a position that is readily visible when the doors are in the open and closed positions.

Chapter 23 Motor Fuel Dispensing Facilities and Repair Garages of the 2012 International Fire Code is amended as follows:

Section 2304 Dispensing Operations is amended as follows:

2304.1 Supervision of dispensing. The dispensing of fuel at motor fuel-dispensing facilities shall be ~~conducted by a qualified attendant or shall be under the supervision of a qualified attendant at all times or shall be~~ in accordance with ~~Section 2204.3.~~ the following:

1. Conducted by a qualified attendant; and/or,
2. Shall be under the supervision of a qualified attendant; and/or
3. Shall be an unattended self-service facility in accordance with Section 2204.3.

At any time the qualified attendant of item #1 or #2 above is not present, such operations shall be considered as an unattended self-service facility and shall also comply with Section 2304.3.

Section 2306 General of the 2012 International Fire Code is amended as follows:

2306.1 General. Storage of flammable and combustible liquids shall be in accordance with

Chapter 57, Sections 2306.2 through 2306.6.3and this section. Above ground tanks are not to be used for storage or dispensing of fuels that are accessible to the public. Private and semi-private uses are permitted with primary tanks not to exceed 10,000 gallons individual or twenty thousand aggregate capacities. Storage and dispensing of motor fuels from aboveground tanks shall be limited to private facilities only and shall not be accessible to the public. Primary tanks shall not exceed ten thousand (10,000) gallon individual or twenty thousand (20,000) gallon aggregate capacities.

Chapter 24: Flammable Finishes of the 2012 International Fire Code is amended as follows:

Section 2401 General of the 2012 International Fire Code is amended as follows:

Section 2401.2; delete the section.

~~**2401.2 Nonapplicability**. This chapter shall not apply to spray finishing utilizing flammable liquid or *combustible liquids* which do not sustain combustion, including:~~

~~1. Liquids that have no fire point when tested in accordance with ASTM D92~~
~~2. Liquids with a flashpoint greater than 95F (35C) in a water miscible solution or dispersion with a water and inert (noncombustible) solids content of more than 80 percent by weight.~~

Section 2404 Spray Finishing of the 2012 International Fire Code is amended as follows:

2404.4 Fire protection. New spray ~~Spray~~ booths and spray rooms shall be protected by an *approved* automatic fire-extinguishing system complying with Chapter 9. Protection shall also extend to exhaust plenums, exhaust ducts and both sides of dry filters when such filters are used.

Chapter 32 High Piled Combustible Storage of the 2012 International Fire Code is amended as follows:
Table 3206.2.2 is amended as follows:

Table 3206.2, footnote j; change text to read as follows:

j. ~~Not required when storage areas are protected by~~ Where areas of buildings are equipped with early suppression fast-response (ESFR) ~~sprinkler systems installed in accordance with NFPA 13~~ sprinklers, manual smoke and heat vents or manually activated engineered mechanical smoke exhaust systems shall be required within these areas.

Section 3310.1; add sentence to end of paragraph to read as follows:

When fire apparatus access roads are required to be installed for any structure or development, they shall be approved prior to the time of which construction has progressed beyond completion of the foundation of any structure.

Chapter 50 Hazardous Materials ~~of the~~ 2012 International Fire Code is amended as follows:

Section 5003.1.4.1. Fees: See Chapter 34 of the Code of Ordinances Environmental Section for fees related to a hazardous materials incident.

Chapter 55: Cryogenic Fluids of the 2012 International Fire Code is amended as follows:

Section 5504.3 Storage of the 2012 International Fire Code is amended to read as follows:

Section 5504.3. Outdoor Storage The storage of flammable cryogenic fluids in stationary containers is prohibited in all City of Frisco Zoning Districts except Industrial. The storage of flammable cryogenic fluids in Industrial Zoning Districts requires approval by the *fire code official.* Outdoor storage of containers shall be in accordance with Sections 5504.3.1 through .5504.3.1.2.3.

Chapter 56: Explosives and Fireworks of the 2012 International Fire Code is amended as follows:

Section 5601 General of the 2012 International Fire Code is amended as follows:

Section 5601.1.3; change to read as follows:

5601.1.3 Fireworks. The possession, manufacture, storage, sale, handling and use of fireworks are prohibited.

Exceptions:

1. Only when approved for fireworks displays, ~~S~~storage and handling of fireworks as allowed in Section 5604 and 5608.

~~2. Manufacture, assembly and testing of fireworks as allowed in Section 3305.~~

~~3.~~2. The use of fireworks for approved displays as allowed in Section 5608.

~~4. The possession, storage, sale , handling and use of specific types of Division 1.4G fireworks where allowed by applicable laws, ordinances and regulations, provided such fireworks comply with CPSC 16 CFR, Parts 1500 and 1507, and DOTn 49 CFR, Parts 100-185, for consumer fireworks.~~

Chapter 57: Flammable and Combustible Liquids of the 2012 International Building Code is amended as follows:

Section 5703.6; add a sentence to read as follows:

5703.6 Piping systems. Piping systems, and their component parts, for flammable and combustible liquids shall be in accordance with Sections 5703.6.1 through 5703.6.11. An *approved* method of secondary containment shall be provided for underground tank and

piping systems.

Section 5704 Storage of the 2012 International Fire Code is amended as follows:

5704.2.7.1 Materials Used in Tank Construction. The materials used in tank construction shall be in accordance with NFPA 30. All aboveground tanks shall be designed in accordance Underwriters Laboratory Standard 2085, Protected Aboveground Tanks for Flammable and Combustible Liquids.

Delete Section 5704.2.9.6.1 in its entirety and replace with the following section:

5704.2.9.6.1 Storage of Class I and Class II Liquids. The storage of Class I and Class II liquids in above-ground tanks outside of buildings must be approved by the *fire code official* and comply with applicable state law.

Section 5704.2.11.5; add a sentence to read as follows:

5704.2.11.5 Leak prevention. Leak prevention for underground tanks shall comply with Sections 5704.2.11.5.1 through 5704.2.11.5.3. An *approved* method of secondary containment shall be provided for underground tank and piping systems.

Section 5704.2.11.5.2; change to read as follows:

3404.2.11.5.2 Leak detection. Underground storage tank systems shall be provided with an *approved* method of leak detection from any component of the system that is designed and installed in accordance with NFPA 30 and as specified in Section 5704.2.11.5.3.

Section 5704.2.11.5; add Section 5704.2.11.5.3 to read as follows:

5704.2.11.5.3 Observation wells. Approved sampling tubes of a minimum 4 inches in diameter shall be installed in the backfill material of each underground flammable or combustible liquid storage tank. The tubes shall extend from a point 12 inches below the average grade of the excavation to ground level and shall be provided with suitable surface access caps. Each tank site shall provide a sampling sump at the corners of the excavation with a minimum of 4 tubes. Sampling tubes shall be placed in the product line excavation within 10 feet of the tank excavation and one every 50 feet routed along product lines towards the dispensers, a minimum of two are required.

Section 5706 Special Operations of the 2012 International Fire Code is amended as follows:

5706.2.4.4 Storage of Class I and Class II Liquids. The storage of Class I and Class II liquids in above-ground tanks must be approved by the *fire code official* and comply with applicable state law.

Delete Section 5706.3.1 through 5706.3.8 and replace with the following:

5706.3 Oil and Gas Drilling Regulations.

5706.3.1 Purpose. The exploration, development, and production of oil and gas in the City is an activity that necessitates reasonable regulation to ensure that all property owners, mineral and otherwise, have the right to peaceably enjoy their property and its benefits and revenues. It is hereby declared to be the purpose of this section to establish reasonable and uniform limitations, safeguards, and regulations for present and future operations related to the exploring, drilling, developing, producing, transporting, and storing of oil and gas and other substances produced in association with oil and gas within the corporate City limits, and to the extent allowed or may be allowed by state law, the City's extraterritorial jurisdiction or portions thereof ("ETJ"), to protect the health, safety and general welfare of the public; protect the quality of the natural and built environment; accomplish the orderly and practical production of available mineral, oil, and gas resources; and minimize the potential impact to property and mineral rights owners**5706.3.2 Definitions.**

Abandonment means "abandonment" as used defined by the Texas Railroad Commission and includes the plugging of the well and the restoration of any well site as required by this section.

Blowout preventer means a mechanical, hydraulic, pneumatic or other device or combination of such devices secured to the top of a well casing, including valves, fittings and control mechanisms connected therewith, which can be closed around the drill pipe, or other tubular goods which completely close the top of the casing and are designed for preventing blowouts.

Building means any structure intended for shelter, occupancy, housing or enclosure for persons, animals, or chattel. When separated by dividing walls without openings, each portion of such structure so separated shall be deemed a separate building.

Cathodic protection means an electrochemical corrosion control technique accomplished by applying a direct current to the structure that causes the structure potential to change from the corrosion potential to a protective potential in the immunity region. The required cathodic protection current is supplied by sacrificial anode materials or by an impressed current system.

City means the City of Frisco, Texas.

City Attorney means the City Attorney of the City.

City Code means the Code of Ordinances of the City.

Commission means the Texas Railroad Commission.

Completion of drilling, re-drilling and/or re-working means the date the work is completed for the drilling, re-drilling or re-working and the crew is released by completing their work or contract or by their employer.

Derrick means any portable framework, tower, mast and/or structure which is required or used in connection with drilling or re-working a well for the production of oil and/or gas.

Drilling means digging or boring a new well for the purpose of exploring for, developing or producing oil and/or gas or other hydrocarbons, or for the purpose of injecting oil, gas, water or any other fluid or substance into the earth.

Drilling equipment means the derrick, together with all parts of and appurtenances to such structure, every piece of apparatus, machinery or equipment used or erected or maintained for use in connection with drilling.

Drill site means the premises used during the drilling or re-working of a well or wells located there and subsequent life of a well or wells or any associated operation.

Exploration means geologic or geophysical activities, including seismic surveys, related to the search for oil and/or gas or other subsurface hydrocarbons.

Fire Department means the Fire Department of the City.

Floodplain means any property within the limits as delineated by FEMA (Federal Emergency Management Agency) of the 100-year flood plain or as amended by an engineering flood study of the ultimate developed conditions prior to any reclamation.

Gas means any fluid, either combustible or noncombustible, which is produced in a natural state from the earth and which maintains a gaseous or rarefied state at standard temperature and pressure conditions and/or the gaseous components or vapors occurring in or derived from petroleum or natural gas.

Gas well means the area used for development and production and all operational activities associated with oil and gas for any well drilled, to be drilled, or used for the intended or actual production of natural gas, or a well classified as a gas well under the laws of the State of Texas. Any well drilled, to be drilled, or used for the intended or actual production of natural gas.

Oil well means the area used for development and production and all operational activities associated with oil and gas for any well drilled, to be drilled, or used for the intended or actual production of oil, or a well classified as an oil well under the laws of the State of Texas. Any well drilled, to be drilled, or used for the intended or actual production of natural gas.

Operation site means the area used for development and production and all operational activities associated with oil and gas after drilling activities are complete.

Operator means, for each well, the person listed on the Railroad Commission Form W-1 or Form P-4 for an oil and gas well that is, or will be, actually in charge and in control of drilling, maintaining, operating, pumping or controlling any well, including, without limitation, a unit operator. If the operator, as herein defined, is not the lessee under an oil and gas lease of any premises affected by the provisions of this section, then such lessee shall also be deemed to be an operator. In the event that there is no oil and gas lease relating to any premises affected by this section, the owner of the fee mineral estate in the premises shall be deemed an operator.

Permit means any written license granted by the City for the exploration, development, and production of oil and/or gas wells issued pursuant to rules and regulations of this Section.

Person means both the singular and the plural and means a natural person, a corporation, association, guardian, partnership, receiver, trustee, administrator, executor, and fiduciary or representative of any kind.

Practicable means available and capable of being done after taking into consideration existing technology, cost, and logistics in light of the overall purpose of the activity.

Re-drill means re-completion of an existing well by deepening or sidetrack operations extending more than one hundred fifty (150) feet from the existing well bore.

Re-working means re-completion or re-entry of existing well within the existing bore hole or by deepening or sidetrack operations which do not extend more than one hundred fifty (150) feet from the existing well bore, or replacement of well liners or casings.

Right-of-way means public rights-of-way including streets, easements and other property that is dedicated to the use and benefit of the public.

Street means any dedicated public thoroughfare that affords a means of access to abutting property.

Tank means a container, covered or uncovered, used in conjunction with the drilling or production of oil and/or gas or other hydrocarbons for holding or storing fluids.

Technical advisor means such person(s) familiar with and educated in the oil and gas industry or the law as it relates to oil and gas matters who may be retained from time to time by the City.

Well means a hole or holes, bore or bores, to any horizon, formation, or strata for the purpose of producing oil, gas, liquid hydrocarbon, brine water, or sulphur water, or for use as an injection well for secondary recovery, disposal or production of oil, gas, or other hydrocarbons from the earth or a classified as a well under the laws of the State of Texas. Any well drilled, to be drilled, or used for the intended or actual production of natural gas.

All technical industry words or phrases related to the drilling and production of oil and gas wells not specifically defined in this section shall have the meanings customarily attributable thereto by prudent and reasonable oil and gas industry operators. The following words, terms and phrases, when used in this section, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

5706.3.3 Oversight.

5706.3.3.1 The *Fire Code Official* or his/her designee shall be designated as the Oil and Gas Inspector to enforce, directly or through additional appointed staff, the provisions of this section. The *Fire Code Official* or his/her designee, herein referred to as "Inspector", shall have the authority to issue any orders or directives required to carry out the intent and purpose of this section and its particular provisions. Failure of any person to comply with any such order or directive shall constitute a violation of this section.

5706.3.3.2 The Inspector shall have permitted and unlimited access to enter and inspect any premises covered by the provisions of this section to determine compliance with the provisions of this section and all applicable laws, rules, regulations, standards, or directives of the state. Failure of any person to permit access to the Inspector shall constitute a violation of this section.

5706.3.3.3 The Inspector shall photograph the proposed drilling site, leased property, and adjacent roads, alleys, public utilities and right-of-ways prior to any drilling, onsite activity, or disturbance of the land.

5706.3.3.4 The Inspector shall conduct periodic inspections at least once per year of all wells covered by the provisions of this section to determine that the wells are operating in accordance within proper safety parameters as set out in this section and all regulations of the Commission.

5706.3.3.5 The Inspector shall have the authority to request and receive any records, including any records sent to the Commission, logs, reports and the like, relating to the status or condition of any permitted well. Failure of any person to provide any such requested materials shall be deemed a violation of this section.

5706.3.3.6 The City may from time to time employ a technical advisor or advisors who are experienced and educated in the oil and gas industry or the law as it pertains to oil and gas matters. The function of such advisor(s) shall be to advise, counsel or represent the City on such matters relating to oil and gas operations within the City or its ETJ as the City may want or require and the effect thereof, both present and future, on the health, welfare, comfort and safety of the citizens of the City. In the event such technical advisor(s) is employed for the purpose of advising, counseling or representing the City relative to an operator's unique and particular set of circumstances, case or request relating to this section, then the cost for fees or charges assessed pursuant to this section shall be borne entirely by the operator. Prior to the employment of a technical advisor, the City shall inform the operator of the intended scope of work and the estimated costs and expenses. The employment of a technical advisor shall be approved by the City Council.

5706.3.3.7 In order to hear and decide appeals of orders, decisions, or determinations made by the Inspector relative to the application and interpretation of this section, the Planning and Zoning Commission is hereby appointed as the Oil and Gas Board of Appeals hereto referred to as the Board. The Board shall have and exercise the authority to hear and determine appeals where it is alleged there is error or abuse of discretion regarding the issuance of a permit or the revocation of suspension of any permit issued hereunder, and as provided by this section. The Board does not have the authority to grant a use that is either prohibited or denied.

5706.3.3.8 If an operator (or its officers, employees, agents, contractors, or representatives) fails to comply with any requirement of a permit (including any requirement incorporated by reference as part of the permit), the Inspector shall give written notice to the operator specifying the nature of the failure and giving the operator a reasonable time to cure, taking into consideration the nature and extent of the failure, the extent of the efforts required to cure, and the potential impact on the health, safety, and welfare of the community and potential negative impacts upon the surrounding environment. In no event, however, shall the cure period take more than thirty (30) calendar days. An immediate response to cure shall take place if the failure presents a risk of imminent destruction of property or injury to persons.

5706.3.3.9 If the operator fails to correct the noncompliance within thirty (30) days from the date of the notice, the Inspector may suspend or revoke the permit pursuant to the provisions of this section.

5706.3.3.10 No person shall carry on any operations performed under the terms of the permit issued under this section during any period of any permit suspension or revocation or pending a review of the decision or order of the City in suspending or revoking the permit. Nothing contained herein shall be construed to prevent the necessary, diligent and bona fide efforts to cure and remedy the default or violation for which the suspension or revocation of the permit was ordered for the safety of persons or as required by the Commission.

5706.3.3.11 If the operator does not cure the noncompliance within the time specified in this section, the Inspector, upon written notice to the operator, may notify the Commission and request that the Commission take any appropriate action.

5706.3.3.12 An operator may file an appeal to the Board within thirty (30) days of the suspension.

5706.3.3.13 If an application for a permit is denied by the Inspector, nothing herein contained shall prevent a new permit application from being submitted to the Inspector for the same well.

5706.3.3.14 The operator shall notify the Inspector of any changes to the following information within seven (7) business days after the change occurs:

- The name, address, and phone number of the operator;
- The name, address, and phone number of the person designated to receive notices from the City (which person must be a resident of Texas that can be served in person or by registered or certified mail); and
- The operator's emergency action response plan (including "drive-to-maps" from public rights-of-way to each drill site).

5706.3.3.15 The operator shall notify the Inspector of any change to the name, address, and twenty-four-hour phone number of the person(s) with supervisory authority over drilling or operations activities within one (1) business day.

5706.3.3.16 Permits may not be transferred from one operator to another without prior City approval. In order to transfer a permit to a new

operator, the City must be supplied with all appropriate fees as well as the transfer of operator forms as supplied to the Commission and new insurance certificates.

5706.3.3.17 The operator shall immediately notify the Inspector of any incident resulting in product loss from a hydrocarbon storage facility or pipeline facility, blowout, fire, explosion, incident resulting in injury, death, or property damage, or any other significant incidents as defined by the Commission.

5706.3.3.18 A written report, containing a brief summary of the incident, shall be submitted by the operator to the Inspector by 5:00 p.m. on the first business day of the City following the incident.

5706.3.3.19 A follow-up report shall be submitted by the operator to the Inspector within thirty (30) days following the incident. The operator responsible for the follow-up incident report shall include the following information:

- Operator/applicant name, phone number, address, and, if possible, email address.
- Description of the incident, including, but not limited to, the time, date, location, and cause of the event.
- Duration of the incident, that is, when it began and when it terminated to the degree that it no longer constituted a hazard to the health, safety, and wellbeing of persons or property, regardless of the distance or separation from the place of incident.
- How the incident was brought under control and/or remedied.
- A full and complete description of the type of intercompany investigation or other investigation or inquiry that was made concerning the incident, the findings or results of such inquiry or investigation, and the action taken as a result of the findings and inquiry concerning the prevention of the existence of future hazards.
- Signed and dated by the person responsible for such report.

5706.3.3.20 The operator shall provide a copy of any "incident reports", citations, or written complaints submitted to the Commission within thirty (30) days after the operator has notice of the existence of such reports or complaints. This shall include, but not limited to, notification of any reportable quantity releases of oil, natural gas, and/or associated minerals,

chemicals, or solid and/or liquid wastes, pursuant to regulatory requirements established by the Commission, and notification to the Inspector of any fire, and/or equipment strikes by lightning.

5706.3.3.21 Any person who intends to re-work a permitted well using a drilling rig, to fracture stimulate a permitted well shall give written notice to the Inspector no less then forty eight (48) hours before the activities begin. The notice must identify where the activities will be conducted and must describe the activities in detail, including whether perforating devices will be used, the duration of the activities and the time the activities will be conducted. The notice must also provide the address and twenty-four-hour phone number of the person conducting the activities. The person conducting the activities will post a sign on the property giving the public notice of the activities, including the name, address and twenty-four-hour phone number of the person conducting the activities.

5706.3.3.22 Beginning on December 31 after each well is completed, and continuing on each December 31 thereafter until the operator notifies the Inspector that the well has been abandoned and the site restored, the operator shall submit a written report to the Inspector identifying any changes to the information that was included in the application for the applicable permit that have not been previously reported to the City.

5706.3.3.23 The Inspector may, in his/her sole discretion, require the well operator to perform a soil contamination assessment paid for by the operator within thirty (30) days once drilling operations have been completed.

5706.3.4 Permitting.

5706.3.4.1 A person desiring to engage and/or operate in oil and/or gas production activities shall apply for and obtain a permit under this section. It shall be unlawful for any person acting either for himself or acting as agent, employee, independent contractor, or servant for any person to drill any well, assist in any way in the site preparation, re-working, drilling, re-drilling, deepening, re-entering, activating, converting, operation, construction of rigs or tank batteries, fracturing, and pressurizing or conduct any activity related to the production of oil and/or gas without first obtaining a permit issued by the City in accordance with this Ordinance.

5706.3.4.2 A permit shall constitute the authority for drilling, activating, operation, construction of rigs or tank batteries, stimulation, fracturing, pressurizing, production enhancement, production gathering or production maintenance, repair, re-working, testing, plugging and abandonment and/or any other activity associated with mineral exploration at the site of

the well identified in the permit. A separate permit is required for each well.

5706.3.4.3 An operator shall obtain a new permit in accordance with the provisions of this Ordinance if the operator is re-entering and drilling an abandoned well.

5706.3.4.4 An operator shall obtain a new permit in accordance with the provisions of this Ordinance for the purpose of re-drilling, deepening or converting to a depth or use other than set forth in the current permit.

5706.3.4.5 A permit is not required for seismic surveys. The operator conducting the seismic survey, however, shall provide notice to the Inspector no less than twenty four (24) hours prior to the commencement of any seismic survey activities on site, and therein shall provide the following information:

- Operator/applicant name, phone number, address, and, if possible, email address; if the operator is a corporation, the state of incorporation, and if the operator is a partnership, the names and addresses of the general partners shall be provided.
- Location of seismic survey.
- Date and time the seismic survey will be conducted.
- Detailed explanation of the seismic survey method to be used on site.
- Date and time the seismic survey will be completed.

5706.3.4.6 Notice to the Inspector of a seismic survey only provides the City with fair notice that a seismic survey will be performed, and shall not constitute fair notice that drilling or other oil and/or gas operations or activities will occur. A permit shall not be required to fracture stimulate a permitted well after initial completion. The operator conducting the activities shall give written notice to the Inspector no less then forty eight (48) hours before the activities begin, and therein shall provide the following information:

- Location of where the activities will be conducted.
- Date and time the activities will be conducted.
- Description of the activities in detail.

- The duration of the activities and the time the activities will be conducted.

- The address and twenty-four-hour phone number of the person conducting the activities.

- The person conducting the activities will post a sign on the property giving the public notice of the activities, including the name, address and twenty-four-hour phone number of the person conducting the activities.

5706.3.4.7 A permit shall automatically terminate if drilling is not commenced within sixty-two (62) months from the date of the issuance of the permit. The Inspector may review the Permit at anytime in light of changing development in the area of the proposed well location and implement a termination notice which will terminate the Permit if drilling is not commenced within sixty (60) days from the date of notification.

5706.3.4.8 The permits required by this Ordinance are in addition to and are not in lieu of any permit that may be required by any other provision by the City or by any other governmental agency.

5706.3.4.9 No permit shall be issued for any well to be drilled that is in non-compliance with any standard, provision, procedure and/or recommendation detailed under any current City ordinances.

5706.3.4.10 No permit shall be issued to any operator who is in non-compliance with any standard, provision, procedure and/or recommendation detailed under any current City ordinances.

5706.3.4.11 No permit shall be issued to any operator who has not paid outstanding fees or fines owed to the City.

5706.3.4.12 No additional permit or filing fees shall be required for any wells existing and approved by the City on the effective date of this section or any wells in existence or on any wells on which drilling has commenced on land annexed into the City after the effective date of this section.

5706.3.4.13 By acceptance of any permit issued pursuant to this section, the operator expressly stipulates and agrees to be bound by and comply with the provisions of this section. The terms of this section shall be deemed to be incorporated in any permit issued pursuant to this section with the same force and effect as if this section was set forth verbatim in such permit.

5706.3.5 Application.

5706.3.5.1 Every application for an oil and gas well permit issued pursuant to this section shall be in writing signed by the operator, or some person duly authorized to sign on his or her behalf, and filed with the oil and gas inspector.

5706.3.5.2 The application shall include the following information about the project. Any expansion or change in operations will require a different permit and shall be considered a different project. An application shall not be filed by City staff, considered complete or be considered to give the City notice of the project to be undertaken by the applicant until all of the following information is provided to the City, along with any applicable fees ("complete application"):

a. The date of the application.

b. An accurate legal description of the lease property or property to be used for the oil and/or gas operation, the parcel, and the production unit and name of the geologic formation as used by the Commission. Property recorded by plat should reference subdivision, block, and lot numbers, as applicable.

c. Proposed well name.

d. Exact and correct acreage of the proposed drill site.

e. Surface property owner name(s), phone number(s), address(es), and, if possible, email address(es).

f. Mineral lessee name, phone number, address, and, if possible, email address.

g. Mineral owner name, phone number, address, and, if possible, email address.

h. Operator/applicant name, phone number, address, and, if possible, email address. If the operator is a corporation or other entity that is not a partnership, the state of incorporation or formation and the names and addresses of the registered agent shall be provided. If the operator is a partnership, the state of formation and the names and addresses of the general partner(s) shall be provided (if the general partner is an entity, the information required to be provided for entities shall also be provided).

i. Name, phone number, address, and, if possible, email address of the individual designated to receive notice in addition to the registered agent or general partner, if any.

j. Name of representative with supervisory authority over all oil and/or gas operation site activities and a twenty-four-hour phone number.

k. Name, address and twenty-four-hour phone number of the person to be notified in case of an emergency.

l. Location and description of all improvements and structures within one thousand (1000) feet of the proposed drill site.

m. Owner's name and address of each parcel of property within one thousand (1000) feet of the proposed drill site.

n. Map identifying all fresh water wells within one thousand (1000) feet of the proposed drill site.

o. Map showing proposed transportation route and road for equipment, chemicals or waste products used or produced by the oil and/or gas operation.

p. A site plan of the proposed operation site showing the location of all improvements and equipment, including the location of the proposed well and other facilities, including, but not limited to, tanks, pipelines, compressors, separators, and storage tanks as well as details to the projected location of the major components of the drilling site, lease line and property lines, impacted vegetation, floodplains, topographic contours, creeks and other topographic features, adjacent buildings and other structures, temporary and permanent fencing and landscaping and the measured distance from the well site to these major components. In addition, the site plan must conform to all relevant standards and requirements described in the City's Comprehensive Zoning Ordinance No. 00-11-01, as it exists or may be amended (the "CZO").

q. Provide typical well site schematics showing layout during and upon completion of drilling.

r. A tree survey prepared pursuant to the City's current tree

preservation ordinances and requirements, including but not limited to those located in the CZO, in any case where trees are present within the drill site.

s. Copies of all reports required by the Commission, specifically, including a copy of the approved Railroad Commission Form W-1 and/or P-4.

t. A copy of the approved Commission permit to drill together including attachments and survey plats that are applicable to the drill and/or operation sites.

u. A copy of the storm water pollution prevention plan as required by the Commission, Texas Commission on Environmental Quality, and/or the United States Environmental Protection Agency (EPA).

v. A copy of the Notice of Intent as filed with the EPA shall be submitted to the Inspector within seven (7) business days prior to the commencement of any onsite activity.

w. A copy of the determination by the Texas Commission on Environmental Quality of the depth of useable quality ground water.

x. A determination, by a qualified environmental scientist qualified to delineate wetlands, of the presence or absence of jurisdictional wetlands and waters of the U.S., and an indication of the location of any jurisdictional wetlands. If waters of the U.S. or jurisdictional wetlands are impacted then a permit must be requested from the Fort Worth district, Army Corp of Engineers.

y. A signed road repair and maintenance agreement supplied by the City that provides that the lease holder or operator of the drilling operation shall repair, at his/her/its own expense, any damage to public roads, streets, or highways, caused by the use of heavy vehicles for any activity associated with the preparation, drilling, production, and operation of oil and/or gas wells ("road maintenance agreement").

z. An erosion control plan that identifies and indicates the proposed methods of erosion control and complies with all local, State and Federal requirements.

aa. A restoration plan prepared by a team of restoration professionals, to include but not limited to a professional engineer, hydrologist and biologist; and submitted to the City for approval. Funds for the cost of restoration must be in escrow.

bb. A copy of the hazardous materials management plan as required by the City's Fire Marshal's office. In addition to the hazardous materials management plan, all material safety data sheets (MSDSs) for all hazardous materials stored, transported, and/or temporarily used on the drilling site shall be provided to the Inspector.

cc. A copy of the emergency response plan as required by the City's Fire Marshal's office.

dd. A description of public utilities required during drilling and operation.

ee. A description of water source to be used during drilling.

ff. Evidence of insurance and security requirements under this section.

gg. A statement, under oath, signed by the operator, or designated representative, that the information submitted with the application is, to the best knowledge and belief of the operator or designated representative, true and correct.

hh. All required application and well permit fees.

The Inspector, within thirty (30) days after receiving a complete application and remittance of all fees, insurance, and security per the requirements of this section, shall review and approve or disapprove the application. Every application that is disapproved shall also be considered expired as of the date of disapproval. If an incomplete application is received by the Inspector, the Inspector shall send a notice to the applicant within ten (10) days of receipt thereof stating the information needed for the application to be complete and notifying the applicant that the application shall expire forty-five (45) days after the date it was filed if the information required to make it complete is not received.

5706.3.6 Amended Application.

Amended Permits may be submitted for with proposed changes with all

requirements met to be approved or disapproved within thirty (30) days.

5706.3.7 Fracture Stimulation Requirements.

Any person who intends to re-work a permitted well using a drilling rig, to fracture stimulate a permitted well after initial completion shall give written notice to the oil and gas inspector no less then forty eight (48) hours before the activities begin. The notice must identify where the activities will be conducted and must describe the activities in detail, including whether explosive charges will be used, the duration of the activities and the time the activities will be conducted. The notice must also provide the address and twenty-four-hour phone number of the person conducting the activities. If requested by the oil and gas inspector, the person conducting the activities will post a sign on the property giving the public notice of the activities, including the name, address and twenty-four-hour phone number of the person conducting the activities.

5706.3.6 BOND, LETTERS OF CREDIT, INDEMNITY, INSURANCE.

5706.3.6.1 *General requirements.* Every operator shall be required to:

(1) Comply with the terms and conditions of this section and the permit issued hereunder.

(2) Promptly clear drill and operation-sites of all litter, trash, waste and other substances used, allowed, or occurring in the operations, and after abandonment or completion grade, level and restore such property to the same surface conditions as nearly as possible as existed before operations.

(3) Indemnify and hold harmless the City, its officers, agents, and employees from and against any and all claims, losses, damages, causes of action, suits and liability of every kind, including all expenses of litigation, court costs, and attorney's fees, for injury to or death of any person or for damage to any property arising out of or in connection with the work done by operator under a permit:

a. Where such injuries, death or damages are caused by operator's sole negligence or the joint negligence of operator and any other person or entity, operator’s strict liability, tort or act or omission; and

b. Regardless of whether such injuries, death or damages are caused in whole or in part by the negligence or willful act or omission of operator.

(4) Promptly pay all fines, penalties and other assessments imposed due to breach of any terms of the permit.

(5) Promptly restore to its former condition any public property or right-of-way

damaged by the oil and/or gas operation.

5706.3.6.2 *Bond, irrevocable letter of credit.*

Prior to the issuance of a permit the operator shall provide the Inspector with a security instrument in the form of a bond or an irrevocable letter of credit as follows:

a. Bond. A bond shall be executed by a reliable bonding or insurance institution authorized to do business in Texas, acceptable to the City. The bond shall become effective on or before the date the permit is issued and shall remain in force and effect for at least a period of six (6) months after the expiration of the permit term or until the well is plugged and abandoned and the site is restored, whichever occurs first. The operator shall be listed as principal and the instrument shall run to the City, as obligee, and shall be conditioned that the operator will comply with the terms and regulations of this section and the City. The original bond shall be submitted to the Inspector with a copy of the same provided to the City Secretary.

b. Letter of credit. A letter of credit shall be issued by a reputable bank authorized to do business in Texas and shall become effective on or before the date the permit is issued. The letter of credit shall remain in force and effect for at least a period of six (6) months after the expiration of the permit term. If the letter of credit is for a time period less than the life of the well as required by this section, the operator must renew the letter of credit or replace the letter of credit with a bond in the amount required by this ordinance, on or before forty-five (45) days prior to the expiration date of the letter of credit. If the operator fails to deliver to the City either the renewal letter of credit or replacement bond in the appropriate amount on or before forty-five (45) days prior to the expiration date of the letter of credit, the City may draw the entire face amount of the attached letter of credit to be held by the City as security for operator's performance of its obligations under this ordinance.

The City shall be authorized to draw upon such letter of credit to recover any fines or penalties assessed under this ordinance. Evidence of the execution of a letter of credit shall be submitted to the Inspector by submitting an original signed letter of credit from the banking institution, with a copy of the same provided to the City Secretary.

c. The principal amount of any security instrument shall be fifty thousand dollars ($50,000.00) for any single well. If, after completion of a well, the applicant/operator, who initially posted a fifty thousand dollar ($50,000.00) bond or letter of credit, has complied with all of the provisions of this section and whose well in the producing stage and all

drilling operations have ceased, may submit a request to the Inspector to reduce the existing security instrument to ten thousand dollars ($10,000.00) for the remainder of the time the well produces without reworking. During reworking operations, the amount of the bond or letter of credit shall be maintained at fifty thousand dollars ($50,000.00).

d. If at any time after no less than a fifteen (15) day written notice to the operator and a public hearing, the City Council shall deem any operator's bond or letter of credit to be insufficient, it may require the operator to increase the amount of the bond or letter of credit up to a maximum of three hundred thousand dollars ($300,000.00) per well.

e. Whenever the Inspector finds that a default has occurred in the performance of any requirement or condition imposed by this section, written notice shall be given to the operator. Such notice shall specify the work to be done, the estimated cost and the period of time deemed by the Inspector to be reasonably necessary for the completion of such work. After receipt of such notice, the operator shall, within the time therein specified, either cause or require the work to be performed. If the operator fails to do so, it shall be required to pay to the City one hundred twenty-five (125) percent of the estimated cost of doing the work as set forth in the notice. In no event, however, shall the cure period be less than thirty (30) days unless the failure presents a risk of imminent destruction of property or injury to persons or unless the failure involves the operator's failure to provide periodic reports as required by this section. The City shall be authorized to draw against any irrevocable letter of credit or bond to recover such amount due from the operator. Upon receipt of such monies, the City shall proceed by such mode as deemed convenient to cause the required work to be performed and completed, but no liability shall be incurred other than for the expenditure of said sum in hand. In the event that a well has not been properly abandoned under the regulations of the Commission, such additional money may be required from the operator as is necessary to properly plug and abandon the well and restore the drill site in conformity with the regulations of this section.

f. In the event the operator does not cause the work to be performed and fails or refuses to pay over to the City the estimated cost of the work to be done as set forth in the notice, or the issuer of the security instrument refuses to honor any draft by the City against the applicable irrevocable letter of credit or bond the City may proceed to obtain compliance and abate the default by way of civil action against the operator, or by criminal action against the operator, or by both such methods.

g. When a well or wells covered by a irrevocable letter of credit or bond required herein have been properly abandoned in conformity with all regulations of this section, and in conformity with all regulations of the

Commission and notice to that effect has been received by the City, or upon receipt of a satisfactory substitute, the irrevocable letter of credit or bond issued in compliance with these regulations shall be terminated and canceled.

5706.3.6.3 *Insurance.* In addition to the bond or letter of credit required pursuant to this section, the operator shall carry a policy or policies of insurance for each of the types of insurance listed below issued by an insurance company or companies authorized to do business in Texas. In the event such insurance policy or policies are canceled, the Permit shall be suspended on such date of cancellation and the operator's right to operate under such Permit shall immediately cease until the operator files additional insurance as provided herein.

(1) *General requirements applicable to all policies.*

a. The City, its officials, employees, agents and officers shall be endorsed as an "additional insured" to all policies except employer's liability coverage under the operator's workers compensation policy.

b. All policies shall be written on an occurrence basis except for environmental pollution liability (seepage and pollution coverage) and excess or umbrella liability, which may be on a claims-made basis.

c. All policies shall be written by an insurer with an A-: VIII or better rating by the most current version of the A. M. Best Key Rating Guide or with such other financially sound insurance carriers acceptable to the City.

d. Deductibles shall be listed on the certificate of insurance and shall be on a "per occurrence" basis unless otherwise stipulated herein.

e. Certificates of insurance shall be delivered to the City, evidencing all the required coverages, including endorsements, prior to the issuance of a Permit.

f. All policies shall be endorsed with a waiver of subrogation providing rights of recovery in favor of the City.

g. Any failure on part of the City to request required insurance documentation shall not constitute a waiver of the insurance requirement specified herein.

h. Each policy shall be endorsed to provide the City a minimum thirty (30) day notice of cancellation, non-renewal, and/or material change in policy terms or coverage. A ten (10) day notice shall be acceptable in the event of non-payment of premium.

i. During the term of the Permit, the operator shall report, in a timely

manner, to the Inspector any known loss occurrence which could give rise to a liability claim or lawsuit or which could result in a property loss.

j. Upon request, certified copies of all insurance policies shall be furnished to the City.

(2) *Standard commercial general liability policy.* This coverage must include premises, operations, blowout or explosion, products, completed operations, sudden and accidental pollution, blanket contractual liability, underground resources damage, broad form property damage, independent contractor's protective liability and personal injury. This coverage shall be a minimum combined single limit of one million dollars ($1,000,000.00) per occurrence location for bodily injury and property damage.

(3) *Excess or umbrella liability.* Five million dollars ($5,000,000.00) excess, if the operator has a stand-alone environmental pollution liability (EPL) policy. Ten million dollars ($10,000,000.00) excess, if the operator does not have a stand-alone EPL policy. Coverage must include an endorsement for sudden or accidental pollution. If seepage and pollution coverage is written on a "claims made" basis, the operator must maintain continuous coverage and purchase extended coverage period insurance when necessary.

(4) *Environmental pollution liability coverage.*

a. Operator shall purchase and maintain in force for the duration of the permit, insurance for environmental pollution liability applicable to bodily injury, property damage, including loss of use of damaged property or of property that has not been physically injured or destroyed; cleanup costs; and defense, including costs and expenses incurred in the investigation, defense or settlement of claims; all in connection with any loss arising from the insured site. Coverage shall be maintained in an amount of at least one million dollars ($1,000,000.00) per loss, with an annual aggregate of at least ten million dollars ($10,000,000.00).

b. Coverage shall apply to sudden and accidental pollution conditions resulting from the escape or release of smoke, vapors, fumes, acids, alkalis, toxic chemicals, liquids or gases, waste material or other irritants, contaminants or pollutants.

c. The operator shall maintain continuous coverage and shall purchase extended coverage period insurance when necessary. The extended coverage period insurance must provide that any retroactive date applicable to coverage under the policy precedes the effective date of the issuance of the permit by the City.

(5) *Control of well.* The policy should cover the cost of controlling a well that

is out of control or experiences a blowout, re-drilling or restoration expenses, seepage and pollution damage as first party recovery for the operator and related expenses, including, but not limited to, loss of equipment, experts and evacuation of residents.

a. Five million dollars ($5,000,000.00) per occurrence/no aggregate, if available, otherwise an aggregate of ten million dollars ($10,000,000.00).

b. Five hundred thousand dollars ($500,000.00) sub-limit endorsement may be added for damage to property for which the operator has care, custody and control.

(6) *Workers compensation and employers liability insurance.*

a. Workers compensation benefits shall be Texas Statutory Limits.

b. Employers liability shall be a minimum of five hundred thousand dollars ($500,000.00) per accident.

c. Such coverage shall include a waiver of subrogation in favor of the City and provide coverage in accordance with applicable state and federal laws.

(7) *Automobile liability insurance.*

a. Combined single limit of one million dollars ($1,000,000.00) per occurrence for bodily injury and property damage.

b. Coverage must include all owned, hired and not-owned automobiles.

(8) *Certificates of insurance.*

a. The insurance company must be admitted or approved to do business in the State of Texas, unless the coverage is written by a surplus lines insurer.

b. The insurance set forth by the insurance company must be underwritten on forms that have been approved by the Texas State Board of Insurance or ISO, or an equivalent policy form acceptable to the City, with the exception of environmental pollution liability and control of well coverage.

c. Sets forth all endorsements and insurance coverage according to requirements and instructions contained herein.

d. Shall specifically set forth the notice of cancellation, termination, or

change in coverage provisions to the City. All policies shall be endorsed to read:

"THIS POLICY WILL NOT BE CANCELED OR NON-RENEWED WITHOUT 30 DAYS ADVANCED WRITTEN NOTICE TO THE OWNER AND THE CITY EXCEPT WHEN THIS POLICY IS BEING CANCELED FOR NONPAYMENT OF PREMIUM, IN WHICH CASE 10 DAYS ADVANCE WRITTEN NOTICE IS REQUIRED"

or equivalent.

e. Original endorsements affecting coverage required by this section shall be furnished with the certificates of insurance.

5706.3.6.4 *Indemnification and express negligence provisions.*

(1) Each permit issued by the Inspector shall include the following language: Operator does hereby expressly release and discharge, all claims, demands, actions, judgments, and executions which it ever had, or now has or may have, or assigns may have, or claim to have, against the City of Frisco, and/or its departments, officials, agents, officers, servants, successors, assigns, sponsors, volunteers, or employees, created by, or arising out of personal injuries, known or unknown, and injuries to property, real or personal, or in any way incidental to or in connection with the performance of the work performed by the operator under a permit. The operator shall fully defend, protect, indemnify, and hold harmless the City of Frisco, its departments, officials, agents, officers, servants, employees, successors, assigns, sponsors, or volunteers from and against each and every claim, demand, or cause of action and any and all liability, damages, obligations, judgments, losses, fines, penalties, costs, fees, and expenses incurred in defense of the City of Frisco, its departments, officials, agents, officers, servants, or employees, including, without limitation, personal injuries and death in connection therewith which may be made or asserted by operator, its employees, contractors, representatives, suppliers, agents, assigns, or any third parties on account of, arising out of, or in any way incidental to or in connection with the performance of the work performed by the operator under a permit. The operator agrees to indemnify and hold harmless the City of Frisco, its departments, officials, officers, agents, servants, employees, successors, assigns, sponsors, or volunteers from any liabilities or damages suffered as a result of claims, demands, costs, or judgments against the City of Frisco, its departments, officials, officers, agents, servants, or employees, created by, or arising out of the acts or omissions of the City of Frisco occurring on the drill site or operation site in the course and scope of inspecting and permitting the oil or gas wells **INCLUDING, BUT NOT LIMITED TO, CLAIMS AND DAMAGES ARISING IN WHOLE OR IN PART FROM THE NEGLIGENCE OF THE CITY OF FRISCO OCCURRING ON THE DRILL SITE OR OPERATION-SITE IN THE COURSE AND SCOPE OF INSPECTING AND PERMITTING THE OIL**

OR GAS WELLS. IT IS UNDERSTOOD AND AGREED THAT THE INDEMNITY PROVIDED FOR IN THIS SECTION IS AN INDEMNITY EXTENDED BY THE OPERATOR TO INDEMNIFY AND PROTECT THE CITY OF FRISCO, TEXAS AND/OR ITS DEPARTMENTS, AGENTS, OFFICERS, SERVANTS, OR EMPLOYEES FROM THE CONSEQUENCES OF THE NEGLIGENCE OF THE CITY OF FRISCO, TEXAS AND/OR ITS DEPARTMENTS, AGENTS, OFFICERS, SERVANTS, OR EMPLOYEES, WHETHER THAT NEGLIGENCE IS THE SOLE OR CONTRIBUTING CAUSE OF THE RESULTANT INJURY, DEATH, AND/OR DAMAGE.

5706.3.6.5 *Notice.* The individual designated to receive notice shall be a resident of Texas upon whom all orders and notices provided in this section may be served in person or by registered or certified mail. Every operator shall within ten (10) days notify the Inspector in writing of any change in such agent or mailing address unless operations in the City are discontinued and abandonment is complete.

5706.3.6.6 *Acceptance and indemnity agreement.* The operator who has a net worth of not less than twenty-five million dollars ($25,000,000.00), as shown in such owner's or operator's most recent audited financial statements, may substitute an acceptance and indemnity agreement in lieu of the bond or irrevocable letter of credit and insurance requirements set forth in this section, provided that such acceptance and indemnity agreement shall be in a form acceptable to, and approved by, the City Attorney and the Director of Administrative Services or his/her designee of the City. The Inspector may request an annual review of the operator's most recent audited financial statements to assure compliance with this section.

5706.3.7 Buffering and Setbacks

5706.3.7.1 No gas well permit shall be issued for any well to be drilled within any of the right-of-way, streets or alleys of the City and/or projected right-of-way, streets or alleys shown by the current comprehensive plan of the city, and no right-of-way, street or alley shall be blocked, encumbered or closed due to any exploration, drilling or production operations unless prior consent is obtained from the Inspector. The Inspector may grant permission for a right-of-way, street or alley to be blocked, encumbered or closed that is temporary and states the hour(s) and day(s) that any right-of-way, street or alley may be blocked, encumbered or closed.

5706.3.7.2 No permit shall be issued for any well, the center of which, at the surface of the ground, is located within five hundred (500) feet to the closest point, calculated in a straight line, without regard to intervening structures or objects, of the following:

- Any building used, or designed and intended to be used, for human occupancy or for any building used, or designed and intended to be used, for human occupancy for which a building permit has been issued on or before the date the application for a drilling permit is filed with the Inspector.

- Any type of surface water conveyance, including, but not limited to, creeks, streams, drainage ditches, or other constructed storm water conveyance systems, calculating distance in a straight line from the conveyance centerline.

- Any lease line as indicated on Railroad Commission Form W-1, or recorded property, lot or tract line.

- Any existing storage tank or source of potential ignition.

- Any existing or projected public street, road, highway, or right-of-way line.

- Any fresh water well.

5706.3.7.3 No permit shall be issued for any well, the center of which, at the surface of the ground, is located within five hundred (500) feet of public land or within public land without the prior consent of City Council. The City Council shall review the insurance and security requirements, potential environmental impacts, and threats to public health and safety, on an individual basis prior to issuing the permit.

5706.3.7.4 No permit shall be issued for any well to be drilled within five hundred (500) feet of the 100-year floodplain or within the 100-year floodplain without the following:

- Use of a closed-loop drilling fluid system.

- Complete restoration of the entire lease or operator owned property associated with the drilling site within the 100-year floodplain, which would include an evaluation and a restoration plan prepared by a team of restoration professionals, to include but not limited to a professional engineer, hydrologist and biologist; and submitted to the City for approval. This report would include a list of the exotic/invasive vegetation species observed along with a map showing their locations. It would also incorporate stabilization recommendations where needed for channel or slope stabilization. The report would include a planting plan along with species recommendations for both herbaceous and woody species. The planting plan would be tailored to provide necessary erosion control and to increase the quality of the riparian habitat.

- All land within the lease or operator owned property associated with the drilling site that is located within the 100-year floodplain shall be placed under a conservation easement following restoration.

5706.3.7.5 All tanks shall be set back pursuant to the standards of the Commission and the National Fire Protection Association, but in all cases, shall be at least five hundred (500) feet from the following:

- Any building used, or designed and intended to be used, for human occupancy or for any building used, or designed and intended to be used, for human occupancy for which a building permit has been issued on or before the date the application for a drilling permit is filed with the Inspector.

- Any type of surface water conveyance, including, but not limited to, creeks, streams, drainage ditches, or other constructed storm water conveyance systems, calculating distance in a straight line from the conveyance centerline.

- Any lease line as indicated on Railroad Commission Form W-1, or recorded property, lot or tract line.

- Any existing storage tank or source of potential ignition.

- Any existing or projected public street, road, highway, or right-of-way line.

- Any fresh water well.

5706.3.7.6 No development shall take place within five hundred (500) feet of the well bore prior to the completion of all abandonment procedures.

5706.3.7.7 All buffering and setbacks may be reduced at the discretion of the Board. All distance reductions shall be documented as variances to the requested permit prior to issuance.

5706.3.8 Fences and Gates.

5706.3.8.1 A temporary fence and a secured entrance gate to the drill site shall be required on drill sites during initial drilling, completion, or re-working operations except on those drill sites where twenty-four (24) hour human supervision is present on the drill site. All gates are to be kept locked when the operator or his/her employees are not within the enclosure. So long as stability of the fence is maintained, temporary fence posts shall not be required to be set in concrete

5706.3.8.2 Within thirty (30) days (i) after production has been established, or (ii) after the well has been completed as a producing well but no actual production commences, all operation sites shall be completely enclosed by a permanent chain link fence or other approved fencing material according to the requirements of the requested permit, as follows:

- The fence fabric shall be at least eight (8) feet in height, but no more than ten (10) feet;

- Support posts shall be set in concrete and shall be imbedded into the ground to a depth sufficient to maintain the stability of the fence;

- The chain link fabric shall be galvanized steel wire with a minimum plating of one and two-tenths (1.2) ounces of zinc per square foot of surface area or shall be coated with vinyl or plastic material approved by the Inspector;

- The chain link fence fabric shall have a minimum thickness of eleven (11) gauge;

- The chain link fabric shall be two-inch (2") mesh; provided, however, three and one-half (3 ½) inch mesh may be used on any fence where the fabric is interwoven with artificial screening materials approved by the Inspector;

- Posts and rails shall be standard galvanized, welded pipe, schedule forty (40) or thicker; provided, however, that nongalvanized drill pipe may be used if it exceeds schedule forty (40) in thickness;

- All pipe and other ferrous parts, except chain link fabric and drill pipe, shall be galvanized inside and outside with a plating which contains a minimum of one and two-tenths (1.2) ounces of zinc per square foot of surface area;

- Tension rods shall be three-eighths-inch (3/8") round steel bolt stock. Adjustable tighteners shall be turnbuckle or equivalent having a six-inch (6") minimum take-up. Tension bars shall have minimum thickness of one-fourth (1/4) by three-fourth (3/4) inch; and

3406.3.8.3 All chain link fences shall be equipped with at least one (1) gate. The gate shall meet the following specifications:

- Each gate shall be not less than twelve (12) feet wide and be composed of two (2) gates, each of which is not less than (6) feet wide, or one (1) sliding gate not less than twelve (12) feet wide. If two (2) gates are used, gates shall latch and lock in the center of the span;

- The gates shall be of chain link construction that meets the applicable specifications, or of other approved material that, for safety reasons, shall be at least as secure as chain link fence;

- The gates shall be provided with a combination catch and locking attachment device for a padlock, and shall be kept locked except when being used for access to the site; and

- Operator must provide the Inspector with a "knox padlock" or "knox box with a key" to access the well site to be used only in case of an emergency.

5706.3.9 Landscaping

5706.3.9.1 Screening shrubs shall be installed completely around the well site within thirty (30) days of the start of production or within thirty (30) days after the well has been

completed as a producing well if no actual production commences, whichever is earlier, and shall be sufficient to screen from view the structures sought to be screened. Screening shrubs shall be a minimum of three (3) feet in height planted eight (8) feet on center.

5706.3.9.2 An additional living screen shall be planted within thirty (30) days of the start of production and must mask all chain link fencing from view within six (6) months of the start of production.

5706.3.9.3 Landscaping must utilize native drought tolerant species listed in the "Recommended Plant Materials" section of the CZO, as it exists or may be amended, and, if determined to be necessary by the City, must have an installed irrigation system that provides total water coverage to all plant materials. The vegetation or berms shall be kept in an attractive state and in good condition at all times by the applicant or operator. All landscape and irrigation plans shall be submitted to the City for approval.

5706.3.10 Vehicle Routing and Access

5706.3.10.1 Vehicles associated with drilling and/or production in excess of three (3) tons shall be restricted to state arterials whenever capable of being used. Such vehicles shall be operated on City arterials, collectors and local commercial only when it is not possible to use a state arterial to fulfill the purpose for which such vehicle is then being operated. Truck routes and access points must be identified on the map showing transportation routes and roads for equipment, chemicals or waste products used or produced by the oil and/or gas operation.

5706.3.10.2 Design, location, and arrangement of driveways and parking shall provide safe and convenient movement of vehicular and pedestrian traffic without adversely affecting the public or adjacent development.

5706.3.10.3 Prior to the commencement of any drilling operations, all private roads used for access to the drill site and the operation site itself shall be at least twelve (12) feet wide, have an overhead clearance of fourteen (14) feet and shall be surfaced with crushed rock, gravel or ore and maintained to prevent dust and mud. A concrete apron shall be required at the entrance from the street that has a driveway curb radius of a minimum of twenty (20) feet and a maximum of thirty (30) feet. Brine water, sulphur water, or water in mixture with any type of hydrocarbon, may not be used for dust suppression. In particular cases these requirements governing surfacing of private roads may be altered at the discretion of the Inspector after consideration of all circumstances including, but not limited to, the following: distances from public streets and highways; distances from adjoining and nearby property owners whose surface rights are not leased by the operation; the purpose for which the property of such owners is or may be used; topographical features; nature of the soil; and exposure to wind. No aspect of this section shall be construed to supersede any permitting, review, standards, and regulations set forth in current City engineering design standards or other ordinances.

5706.3.10.4 Operators shall repair, at his/her/its own expense, any damage to public roads, streets, or highways caused by the use of heavy vehicles for any activity associated with the preparation, drilling, production, and operation of oil and gas wells as determined by the City in accordance with the road maintenance agreement.

5706.3.11 Work Hours

Site development and activities, other than drilling, completion, and emergencies, shall be conducted only between 7:00 a.m. and 8:00 p.m. Monday through Saturday.

5706.3.12 Noise

5706.3.12.1 No drilling, producing, formation fracturing or completion shall produce a sound level greater than eighty-five (85) dB(a) when measured at a distance of five hundred (500) feet from the production equipment in question. The noise level shall be the average of sound level meter readings taken consecutively at any given time from four (4) or more diametrically opposite positions, four (4) feet above ground level, when measured at a distance of five hundred (500) feet from the production equipment.

5706.3.12.2 No person or entity shall operate, or allow or cause operation, in connection with the operation of a producing well any engine, compressor or motor-driven machinery of any type which creates a sound level greater than seventy-five (75) dB(a) when measured at a distance of five hundred (500) feet from the well site. The noise level shall be the average of sound level meter readings taken consecutively at any given time from four (4) or more diametrically opposite positions, four (4) feet above ground level, when measured at a distance of five hundred (500) feet from the production equipment.

5706.3.12.3 The City may require noise monitoring at the operator's expense if a complaint is made or the Inspector suspects the sound level to be greater than those standards listed above.

5706.3.12.4 Sound level measurements shall be made with a sound level meter conforming as a minimum, to the requirements of the American National Standards Institute.

5706.3.12.5 If sound levels exceed the dB(a) levels referenced above, the Inspector may require sound reducing mufflers or other appropriate methods of noise reduction.

5706.3.13 Site Upkeep

5706.3.13.1 The property on which a well site is located shall at all times be kept free of all debris, litter, trash, waste, pools of water or other liquids, contaminated soil, high grass, brush, or weeds.

5706.3.13.2 Vegetation and berms shall be maintained and kept in an attractive state at

all times.

5706.3.13.3 Site and/or structures shall not become dilapidated, unsightly or unsafe.

5706.3.13.4 Damage resulting from sedimentation or erosion shall be repaired immediately.

5706.3.13.5 After any spill, leak or malfunction, the operator shall remove or cause to be removed to the satisfaction of the Inspector all waste materials from any public or private property affected by such spill, leak or malfunction. Clean-up operations must begin immediately. If the owner fails to begin site clean-up within twenty-four (24) hours, the City shall have the right to contact the Commission in order to facilitate the removal of all waste materials from the property affected by such spill, leak or malfunction.

5706.3.13.6 All production equipment shall be painted and maintained at all time, including wellheads, pumping units, tanks, and buildings or structures. When requiring painting of such facilities, the Inspector shall consider the deterioration of the quality of the material of which such facility or structure is constructed, the degree of rust, and its appearance. Paint shall be of the neutral color, compatible with surrounding uses. Neutral colors shall include sand, gray and unobtrusive shades of green, blue and brown, or other neutral colors approved by the Inspector.

5706.3.13.7 In the event of the loss of control of any well, operator shall immediately take all reasonable steps to regain control regardless of any other provision of this section and shall notify the Inspector as soon as practicable. If the Inspector, in his or her opinion, believes that danger to persons and property exists because of such loss of well control and that the operator is not taking or is unable to take all reasonable and necessary steps to regain control of such well, the Inspector may then employ any well control expert or experts or other contractors or suppliers of special services, or may incur any other expenses for labor and material which the Inspector deems necessary to regain control of such well. The City shall then have a valid lien against the interest in the well of all working interest owners to secure payment of any expenditure made by the City pursuant to such action of the Inspector in gaining control of said well.

5706.3.14 Abandonment and Site Restoration

5706.3.14.1 All wells shall be abandoned in accordance with the rules of the Texas Railroad Commission; however, all well casings shall be cut and removed to a depth of at least three (3) feet below the surface. No structures shall be built over an abandoned well.

5706.3.14.2 After the well has been completed, or plugged and abandoned, the operator shall clean the drill site or operation site, complete restoration activities and repair all damage to public property caused by such operations within sixty (60) days.

5706.3.14.3 Whenever abandonment occurs pursuant to the requirement of the

Commission, the operator so abandoning shall be responsible for the restoration of the well site to its original condition as nearly as practicable except where in the 100-year floodplain, in which case alternate requirements are listed below.

5706.3.14.4 Abandonment shall be approved by the Inspector after restoration of the drill site has been accomplished. The derrick and all appurtenant equipment thereto shall be removed from drill site. All tanks, towers, and other surface installations shall be removed from the drill site. All concrete foundations, piping, wood, guy anchors and other foreign materials regardless of depth, except surface casing and identification monument, shall be removed from the site, unless otherwise directed by the Commission. All holes and depressions shall be filled with clean, compactable soil. All waste, refuse, or waste material shall be removed from the drill site.

5706.3.14.5 The operator shall furnish a copy of the approval of the Commission confirming compliance with all abandonment proceedings under the state law and a notice of intention to abandon under the provisions of this section and stating the date such work will be commenced. Abandonment may then be commenced on or subsequent to the date so stated.

5706.3.14.6 The Inspector shall photograph the abandoned drilling site, leased property, and adjacent roads, alleys, public utilities and right-of-ways to assess any damage to said property and/or facilities that need to be repaired by the operator.

5706.3.14.7 All abandoned or deserted wells or drill sites shall meet the most current abandonment requirements of the Commission prior to the issuance of any building permit for development of the property.

5706.3.14.8 An area of at least fifty (50) feet by fifty (50) feet, with the surface casing located at center and a twenty five (25) foot service access, shall be restored with native vegetation and shall not be developed. A monument shall be placed above the surface casing identifying the abandoned well and including the latitudinal and longitudinal position.

5706.3.14.9 A complete restoration and placement in a conservation easement shall take place in any area of a drilling lease, drill site or operation site that is located within the 100-year floodplain, and such restoration shall include an evaluation and a restoration plan prepared by a team of restoration professionals, to include but not limited to a professional engineer, hydrologist and biologist; and submitted to the City for approval by the Director of Planning and Development Services and Director of Engineering or their designees. The evaluation shall include a list of the exotic/invasive vegetation species observed along with a map showing their locations. The restoration plan shall incorporate stabilization recommendations (bio-engineering) where needed for channel or slope stabilization and include a planting plan along with species recommendations for both herbaceous and woody species. The planting plan shall be tailored to provide necessary erosion control, as well as increase the quality of the riparian habitat.

5706.3.14.10 After completion of the restoration plan and City approval, the area within the floodplain may not be developed. The complete restoration of the property in accordance with the approved restoration plan shall be completed within one hundred and twenty (120) days of the plan being approved by the City.

5706.3.15 Technical Requirements.

5706.3.15.1 All technical requirements of this ordinance, including but not limited to abandonment of wells, shall be in accordance with the rules of the Texas Railroad Commission, American Petroleum Institute, and other federal, state, and City requirements.

5706.3.15.2 No refining processes are allowed onsite except a dehydrator and separator for separation of liquids from gas with the approval of the Inspector.

5706.3.15.3 In all cases, blowout prevention equipment shall be used on all wells being drilled, worked-over or in which tubing is being changed. Protection shall be provided to prevent blowout during gas operations as required by and in conformance with the requirements of the Commission and the recommendations of the American Petroleum Institute. The operator must equip all drilling wells with adequate blowout preventors, flow lines and valves commensurate with the working pressures involved as required by the Commission.

5706.3.15. 4 All chemicals and/or hazardous materials shall be stored in such a manner as to prevent, contain, and facilitate rapid remediation and cleanup of any accidental spill, leak, or discharge of a hazardous material. Operator shall have all material safety data sheets (MSDSs) for all hazardous materials on site. All applicable federal and state regulatory requirements for the proper labeling of containers shall be followed. Appropriate pollution prevention actions shall be required and include, but are not limited to, chemical and materials raised from the ground (e.g., wooden pallets), bulk storage, instillations and maintenance of secondary containment systems, and protection from storm water and weather elements.

5706.3.15.5 No person or entity shall place, deposit, discharge, or cause or permit to be placed, deposited or discharged, any oil, naphtha, petroleum, asphalt, tar, hydrocarbon substances or any refuse including wastewater or brine from any gas operation or the contents of any container used in connection with any gas operation in, into, or upon any public right-of-way, alleys, streets, lots, storm drain, ditch or sewer, sanitary drain or any body of water or any private property in the City or its ETJ.

5706.3.15.6 Low toxicity glycols, synthetic hydrocarbons, polymers, and esters shall be substituted for conventional oil-based drilling fluids.

5706.3.15.7 No drilling fluid storage shall be located within the City or its ETJ.

5706.3.15.8 Closed-loop drilling fluid systems shall be used instead of lined reserve pits.

5706.3.15.9 Drip pans and other containment devices shall be placed or installed underneath all tanks, containers, pumps, lubricating oil systems, engines, fuel and chemical storage tanks, system valves, connections, and any other areas or structures that could potentially leak, discharge, or spill hazardous liquids, semi-liquids, or solid waste materials, including hazardous waste inseparable by simple mechanical removal processes, and is made up primarily of natural material.

5706.3.15.10 All drilling and production operations shall be conducted in such a manner as to minimize, so far as practicable, dust, vibration, or noxious odors, and shall be in accordance with the best accepted practices incident to drilling for the production of gas and other hydrocarbon substances in urban areas. All equipment used shall be so constructed and operated so that, vibrations, dust, odor or other harmful or annoying substances or effect will be minimized by the operations carried on at any drilling or production site or from anything incident thereto, to the injury or annoyance of persons living in the vicinity; nor shall the site or structures thereon be permitted to become dilapidated, unsightly or unsafe. Proven technological improvements in industry standards of drilling and production in this area shall be adopted as they become available if capable of reducing factors of dust, vibration, noise and odor.

5706.3.15.11 All electrical installations and equipment shall conform to the City ordinances and the appropriate national or international codes.

5706.3.15.12 All electric lines to production facilities shall be located in a manner compatible to those already installed in the surrounding area or subdivision.

5706.3.15.13 Exhaust from any internal combustion engine, stationary or mounted on wheels, used in connection with the drilling of any well or for use on any production equipment shall not be discharged into the open air unless it is equipped with an exhaust muffler, or mufflers or an exhaust muffler box constructed of noncombustible materials sufficient to suppress noise and prevent the escape of obnoxious gases, fumes or ignited carbon or soot.

5706.3.15.14 Wells shall not be allowed to flow or vent directly to the atmosphere without first directing the flow through separation equipment or into a portable tank.

5706.3.15.15 No venting of gas or open flames are allowed other than those expressly allowed by the Commission or approved by the Inspector.

5706.3.15.16 A sign shall be immediately and prominently displayed at the gate on the temporary and permanent site fencing. Such sign shall be durable material, maintained in good condition and, unless otherwise required by the Commission, shall have a surface area of not less than two (2) square feet nor more than four (4) square feet and shall be lettered with the following:

1. Well name and Commission permit/ID number;

2. Name of operator and phone number;

3. The emergency 911 number; and

4. Telephone numbers of two (2) persons responsible for the well who may be contacted 24 hours in case of emergency.

5706.3.15.17 Permanent weatherproof signs reading "DANGER NO SMOKING ALLOWED" shall be posted immediately upon completion of the well site fencing at the entrance of each well site and tank battery or in any other location approved or designated by the Inspector. Sign lettering shall be four (4) inches in height and shall be red on a white background or white on a red background. Each sign shall include the emergency notification numbers of the Fire Department and the operator, and well and lease designations required by the Commission.

5706.3.15.18 The sign requirements herein are in addition to, and not instead of, any signs required by the Commission. If these sign regulations are duplicative of Commission sign regulations, the more restrictive regulations shall apply.

3406.3.15.19 Onsite storage is prohibited on the operation site. No equipment shall be stored on the drilling or production operation site, unless it is necessary to the everyday operation of the well. Lumber, pipes, tubing and casing shall not be left on the operation site except when drilling or well servicing operations are being conducted on the site.

5706.3.15.20 No vehicle or item of machinery shall be parked or stored on any street, right-of-way or in any driveway, alley or upon any operation site which constitutes a fire hazard or an obstruction to or interference with fighting or controlling fires except that equipment which is necessary for drilling or production operations on the site. The *fire code official* shall be the entity that determines whether equipment on the site shall constitute a fire hazard. No refinery, processing, treating, dehydrating or absorption plant of any kind shall be constructed, established or maintained on the premises. This paragraph shall not be deemed to exclude a conventional gas separator or dehydrator.

5706.3.15.21 Any and all stationary diesel power plants located on the drilling site and are associated with the exploration, development, operation, and production of oil, natural gas, or associated minerals shall have a lube oil purification unit installed, maintained and functional at all times while the diesel plant is in operation.

5706.3.15.22 Surface casing shall be run and set in full compliance with the applicable rules and regulations of the Commission.

5706.3.15.23 No person shall permit any lights located on any drill or operation site to be directed in such a manner so that they shine directly on public roads, adjacent property or property in the general vicinity of the operation site and, in addition, all lights must comply with the “Lighting and Glare Requirements” section of the CZO. To the extent

practicable, and taking into account safety considerations, site lighting shall be directed downward and internally so as to avoid glare on public roads and adjacent dwellings and buildings within five hundred (500) feet. To the extent of any conflict between this paragraph and the CZO, the more restrictive regulation shall control.

5706.3.15.24 Only light sand fracture technology or technologies approved by the Inspector shall be used to fracture stimulate a well. Air, gas, or pneumatic drilling shall not be permitted.

5706.3.15.25 No salt water disposal wells shall be located within the City or area to which this ordinance applies.

5706.3.15.26 Firefighting apparatus and supplies as approved by the Fire Department and required by any applicable federal, state, or local law shall be provided by the operator, at the operator's cost, and shall be maintained on the drilling site at all times during drilling and production operations. The operator shall be responsible for the maintenance and upkeep of such equipment.

5706.3.15.27 Each well shall be equipped with an automated valve that closes the well in the event of an abnormal change in operating pressure. All well heads shall contain an emergency shut off valve to the well distribution line. The Fire Department shall have access to the well site to enable it to close the shut-off valve in an emergency.

5706.3.15.28 Vehicles, equipment, and machinery must not interfere with fighting or controlling fires.

5706.3.15.29 All tanks and permanent structures shall conform to the American Petroleum Institute (A.P.I.) and National Fire Protection Association specifications unless other specifications are approved by the Inspector. All tanks shall be no higher than eight (8) feet above the terrain.

5706.3.15.29.1 Each storage tank shall be equipped with a level control device that will automatically activate a valve to close the well in the event of excess liquid accumulation in the tank.

5706.3.15.29.2 Tank battery facilities shall be equipped with a remote foam line and a lightning arrestor system.

5706.3.15.29.3 Tanks must be equipped with a secondary containment system including lining with and impervious material, a minimum of three (3) feet and one and one-half (1½) the contents of the largest tank and one (1) foot below surface level.

5706.3.15.29.4 Tanks must be anchored.

5706.3.15.30 The operator shall apply to the City for a franchise agreement on, over, under, along or across the city streets, sidewalks, rights-of-way, alleys and other City

property for the purpose of constructing, laying, maintaining, operating, repairing, replacing and removing pipelines in accordance with any applicable City ordinances and regulations so long as production or operations may be continued under any permit issued pursuant to this section. Operator shall:

(1) not interfere with or damage water, sewer or gas lines or the facilities of public utilities located on, under or across the course of such rights-of-way;

(2) furnish the Inspector a plat showing the location of such pipelines;

(3) construct such lines out of pipe in accordance with the City codes and regulations and insure that lines are properly cased and vented if under a street; and

(4) Grade, level and restore such property to substantially the same surface condition as existed when operations for the drilling of the well were first commenced.

5706.3.15.31 Operator must follow erosion control practices such as compost berms at least one (1) foot high and two (2) feet wide used to contain drainage. No aspect of this section shall be construed to supersede any permitting, review, standards, and regulations set forth in current City engineering design standards or other ordinances.

5706.3.15.32 Each gas well must be equipped with a cathodic protection system or alternative approved by the Inspector to protect the production casing from corrosion.

5706.3.15.33 Only freshwater mud systems are permitted.

5706.3.15.34 No metal additive shall be used in drilling fluid.

~~**3406.3.16 The Following Fees Apply to Section 3406.3:**~~

~~$5000.00 New Well Permit Fee, Oil, Gas or other (per well)~~
~~$ 100.00 Annual Inspection Fee~~
~~$ 500.00 – Operator Transfer Fee~~
~~$ 500.00 – Appeal Fee~~

Section 5706.5.4; delete Section 5706.5.4.5 and replace with the following:

5706.5.4.5 Commercial, industrial, governmental or manufacturing.
Dispensing of Class II and III motor vehicle fuel from tank vehicles into the fuel tanks of motor vehicles located at commercial, industrial, governmental or manufacturing establishments is allowed where permitted, provided such dispensing operations are conducted in accordance with Sections 5706.5.4.5.1 through 5706.5.4.5.3.

5706.5.4.5.1 Site requirements.

1. Dispensing may occur at sites that have been permitted to conduct mobile fueling.

2. A detailed site plan shall be submitted with each application for a permit. The site plan must indicate:

   a. all buildings, structures, and appurtenances on site and their use or function;

   b. all uses adjacent to the property lines of the site;

   c. the locations of all storm drain openings, adjacent waterways or wetlands;

   d. information regarding slope, natural drainage, curbing, impounding and how a spill will be retained upon the site property; and,

   e. The scale of the site plan.

3. The *fire code official* is authorized to impose limits upon: the times and/or days during which mobile fueling operations are allowed to take place and specific locations on a site where fueling is permitted.

4. Mobile fueling operations shall be conducted in areas not generally accessible to the public.

5. Mobile fueling shall not take place within 15 feet (4.572 m) of buildings, property lines, or combustible storage.

5706.5.4.5.2 Refueling Operator Requirements.

1. The owner of a mobile fueling operations shall provide to the jurisdiction a written response plan which demonstrates readiness to respond to a fuel spill, carry out appropriate mitigation measures, and to indicate its process to properly dispose of contaminated materials when circumstances require.

2. The tank vehicle shall comply with the requirements of NFPA 385 and Local, State and Federal requirements. The tank vehicle's specific functions shall include that of supplying fuel to motor vehicle fuel tanks. The vehicle and all its equipment shall be maintained in good repair.

3. Signs prohibiting smoking or open flames within 25 feet (7.62 m) of the tank vehicle or the point of fueling shall be prominently posted on 3 sides of the vehicle including the back and both sides.

4. A fire extinguisher with a minimum rating of 40:BC shall be provided on the vehicle with signage clearly indicating its location.

5. The dispensing nozzles and hoses shall be of an approved and listed type.

6. The dispensing hose shall not be extended from the reel more than 100 feet (30.48m) in length.

7. Absorbent materials, non-water absorbent pads, a 10 foot (3.048 m) long containment boom, an approved container with lid, and a non-metallic shovel shall be provided to mitigate a minimum 5-gallon fuel spill.

8. Tanker vehicles shall be equipped with a fuel limit switch such as a count-back switch, limiting the amount of a single fueling operation to a maximum of 500 gallons (1893 L) between resetting of the limit switch.

   Exception: Tankers utilizing remote emergency shut-off device capability where the operator constantly carries the shut-off device which, when activated, immediately causes flow of fuel from the tanker to cease.

9. Persons responsible for dispensing operations shall be trained in the appropriate mitigating actions in the event of a fire, leak, or spill. Training records shall be maintained by the dispensing company and shall be made available to the *fire code official* upon request.

10. Operators of tank vehicles used for mobile fueling operations shall have in their possession at all times an emergency communications device to notify the proper authorities in the event of an emergency.

5706.5.4.5.3 Operational Requirements.

1. The tank vehicle dispensing equipment shall be constantly attended and operated only by designated personnel who are trained to handle and dispense motor fuels.

2. Prior to beginning dispensing operations, precautions shall be taken to assure ignition sources are not present.

3. The engines of vehicles being fueled shall be shut off during dispensing operations.

4. Night time fueling operations shall only take place in adequately lighted areas.

5. The tank vehicle shall be positioned with respect to vehicles being fueled so as to preclude traffic from driving over the delivery hose and between the tank vehicle and the motor vehicle being fueled.

6. During fueling operations, tank vehicle brakes shall be set, chock blocks shall be in place and warning lights shall be in operation.

7. Motor vehicle fuel tanks shall not be topped off.

8. The dispensing hose shall be properly placed on an approved reel or in an approved compartment prior to moving the tank vehicle.

9. The *fire code official* and other appropriate authorities shall be notified when a reportable spill or unauthorized discharge occurs.

5906.1 General. Storage, use, handling and processing of magnesium, including the pure metal and alloys of which the major part is magnesium, shall be in accordance with Chapter 27 and Sections 3602.2 through 3606.8 3605.8.

The fire code
Chapter 61: Liquefied Petroleum Gases of the 2012 International Fire Code is amended as follows:

Section 6104 Location of Containers of the 2012 International Fire Code is amended as follows:

6104.2 Maximum Capacity within Established Limits. The storage of LP-gas is restricted for the protection of heavily populated or congested areas to Industrial Zoning Districts within the City of Frisco and as required by the *fire code official*..

6104.2.1 Maximum Capacity within Established Limits. Within the limits established by law restricting the storage of LP-gas for the protection of heavily populated or congested commercial areas, the aggregate capacity of any one (1) installation shall not exceed a two-thousand (2,000)-gallon water capacity.

Section 3809 Storage of Portable LP-Gas Containers Awaiting Use Or Resale of the 2006 International Building Code is amended as follows:

3809.14 Alternative location and protection of storage. Containers located outside of buildings shall not be located within 20 feet (6096 mm) of any exit access doors, exits, stairways or in areas normally used, or intended to be used, as a means of egress.

3809.15 3809.14 Alternative location and protection of storage. Where the provisions of Sections 3809.12 and 3809.13 are impractical at construction sites, or at buildings or structures undergoing major renovation or repairs, the storage of containers shall be as required by the fire code official.

Chapter 80: Referenced Standards of the 2012 International Fire Code is amended as follows:

ASME The American Society of Mechanical Engineers
Three Park Avenue
New York, NY 10016-5990

Standard Reference Number	Title	Referenced in code Section number
A13.1 96 (Reaffirmed 2002)	Scheme for the Identification of Piping Systems	2609.3, 2703.2.2.1, 3003.4.2, 3203.4.5, 3403.5.2

UL Underwriters Laboratories, Inc.
333 Pfingsten Road
Northbrook, IL 60062

Standard Reference Number number	Title	Referenced in code Section
268 96	Smoke Detectors for Fire Alarm Signaling Systems with Revisions through October 2003	907.2.6.2

NFPA National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169-7471

Standard Reference Number	Title	Referenced in code Section Number
13-10	Installation of Sprinkler Systems (As Adopted by the City of Frisco)	Table 906.1.1, 904.9 Table 903.3.1.1, 903.3.2, 903.3.5.1.1, 903.3.5.2, 904.11, 905.3.4, 907.6.3, 1009.3 3201.1, 3204.2, Table 3802.1,

		3208.4, 3210.1, 3401.1, 5104.1, 5106.5.7, 5704.3.3.9, Table 5704.3.6.3(7), 5704.3.7.5.1, 5704.3.8.4
13D-10	Installation of Sprinkler Systems in One-Two Family Dwellings and Manufactured Homes	903.3.1.3 and 903.3.5.1.1
13R-10	Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height (As Adopted by the City of Frisco)	903.3.1.2, 903.3.5.1.1, 903.3.5.1.2, 903.4

Appendix A – Board of Appeals

Appendix C – Fire Hydrant Locations and Distribution is amended as follows:

C105.1 Hydrant Spacing – The ~~average~~ spacing between fire hydrants shall not exceed 500 feet for one and two family residential subdivisions and 300 feet within all other uses. Hydrants will be located at each point of intersecting public streets and fire apparatus access roads. Table C105.1 may be used as a guideline at the discretion of the *Fire Code Official*. ~~that listed in Table C105.1.~~

Appendix D – Fire Apparatus Access Roads is amended as follows:

D103.2 Grade. Fire apparatus access roads shall not exceed ~~10~~ 6 percent in grade.
Exception: Grades steeper than ~~10~~ 6 percent as approved by the Fire Chief.

D103.3 Turning Radius. The minimum inside turning radius shall be no less than 20 feet unless otherwise approved by the *Fire Code Official*.

D103.4 Dead Ends. Dead-end fire apparatus access roads ~~in excess of 150 feet (45 720 mm)~~ shall be provided with ~~width and~~ turnaround provisions in accordance with City of Frisco cul-de-sac thoroughfare standards or as determined by the *Fire Code Official*. ~~Table D103.4~~.

Table D103.4 is deleted in its entirety.

D103.5 Fire apparatus access road gates. (Also see Section 503.6 for additional specifications)

Gates securing the fire apparatus access roads shall comply with all of the following criteria:

1. The minimum Gate width shall be ~~20 feet (6096 mm)~~ 24 feet with a minimum overhead clearance of 14 feet maintained.
2. Gates shall be of the swinging or sliding type. Alternative types may be considered by the *Fire Code Official* as long as they meet the minimum opening requirements and do not constitute a significant delay in emergency response.
3. Construction of gates shall be of materials that allow manual operation by one person.
4. Gate components shall be maintained in an operative condition at all times and replaced or repaired expeditiously when defective.
5. Electric gates shall be equipped with a means of opening the gate by fire department personnel for emergency access (See Chapter 5, Section 503.6). Emergency opening devices shall be approved by the fire code official.
6. Manual opening gates shall not be locked with a padlock or chain and padlock unless they are approved by the *Fire Code Official* and are capable of being opened by means of forcible entry tools or when a key box containing the key(s) to the lock is installed at the gate location.
7. Gate and locking device specifications shall be submitted for approval by the fire code official. A permit is required per Section 503.6.1.
8. Electric gate openers, where provided, shall be listed in accordance with UL 325.
9. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F 2200.

D103.6 Signs. Where required by the fire code official, fire apparatus access roads shall be marked with permanent NO PARKING --- FIRE LANE signs complying with figure 103.6. Signs shall have a minimum dimension of 12 inches (305 mm) wide by 18 inches (457 mm) high and have a minimum of 2 inch red letters on a white reflective background. Signs shall be posted on both sides of the fire apparatus access road as to be read in both directions of travel and as required by Section D103.6.1 or ~~D103.6.2~~.

D103.6.2 Roads more than 26 feet in width is deleted in its entirety.

D104.2 Buildings exceeding 62,000 square feet in area.

The exception is deleted in its entirety.

D106.1 Projects having more than 100 dwelling units.

The exception is deleted in its entirety.

D107.1 One- or two-family dwelling residential developments.

D107.1 One- or two-family dwelling residential developments. Developments of one- or two-family *dwellings* where the number of *dwelling units* exceeds 30 shall be provided with separate and *approved* fire apparatus access roads and shall meet the requirements of Section D104.3.

Exceptions:

1. Where there are more than 30 dwelling units on a single public or private fire

apparatus access road and all dwelling units are equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, 903.3.1.2, or 903.3.1.3 of the International Fire Code, access from two directions will be at the discretion of the *Fire Code Official*.

2. The number of *dwelling units* on a single fire apparatus access road shall not be increased unless fire apparatus access roads will connect with future development, as determined by the *fire code official*.

2. Stays the same

Appendix H Hazardous Materials Management Plan (HMMP) and Hazardous Materials Inventory Statement (HMIS) Instructions is amended as follows:

Added **Section 100 Requirements.**

100.1 General. Appendix H shall be used as the minimum required information and format provided to the Fire Department to meet the requirements of providing a Hazardous Materials Management Plan (HMMP) and/or Hazardous Materials Inventory Statement (HMIS).

100.2 Submission Form. Unless otherwise approved by the *Fire Code Official*, HMMP and/or HMIS submissions will be provided in electronic form, in formats in use by the City at the time of the submission. The *Fire Code Official* can provide the formats required.

Exception: If, in the opinion of the *Fire Code Official*, it is a burden on the applicant to provide electronic submissions, the *Fire Code Official* is authorized to accept the submission in another approved form.